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EDITED BY

S. M. BEMISS, M.D.,

Professor of Medical Jurisprudence and Sanitary Science, University of Louisville.

J. W. BENSON, M.D.,

Professor of Anatomy and General Physiology, University of Louisville.

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CONTENTS.

PAGE

Artesian Well, Du Pont's..... 19
Action of Cod Liver Oil..... 62
Aneurism, Femoral..... 7
Animal Bread of Mexicans..... 49
Amount of Hydrocyanic Acid in Tobacco Smoke..... 51
Alum and Savin in Condylomata..... 128
Ambergris..... 192
Address of President of Kentucky State Medical Society..... 327
Administration of Chloroform..... 503
Asphyxia from Chloroform..... 608
Antiperiodic properties of Hypophosphite of Quinine..... 636
Angeioleucitis, Case of..... 602
Abdominal Tumors mistaken for Ovarian..... 749
Bees, Anæsthesia of..... 636
Burns..... 126
Brain, Concussion of..... 270
Chlorinated Lunar Caustic..... 65
Chorea, two cases of..... 108
Citrate of Iron and Magnesia..... 126
Cod Liver Oil Jelly..... 127
Corns, Cure of by Iodine..... 128
College of Physicians and Surgeons of Louisville, Proceedings of 80, 112, 151, 178, 253, 280, 445, 449, 515, 519, 577, 762.
Communication—On Medical Education..... 217
Communication—On Public Hygiene 290
Communication—From "Straight".. 274
Communication—From do..... 755
Communication—On "Vicious Copartnership," from "Fair Play".. 419
Communication—From New York, by R..... 725
Communication—From Dr. T. W. Fry, on Medical Education..... 727
Communication—From Dr. W. S. Chipley..... 176
Communication—From Joshua Gore, M.D..... 759
Chronic Coryza, Powder in..... 128
Convention of Medical Teachers..... 304
Cinchona Tree..... 408
Chloride Zinc in Gonorrhœa..... 407
Cholera in Germany..... 636
Croup, Case of, successfully treated by Tracheotomy..... 752
Death from want of Sleep..... 54
Diphtheritis.....192, 657, 668, 696
Dislocation of Femur..... 422
Disinfectants in Paris..... 678

PAGE

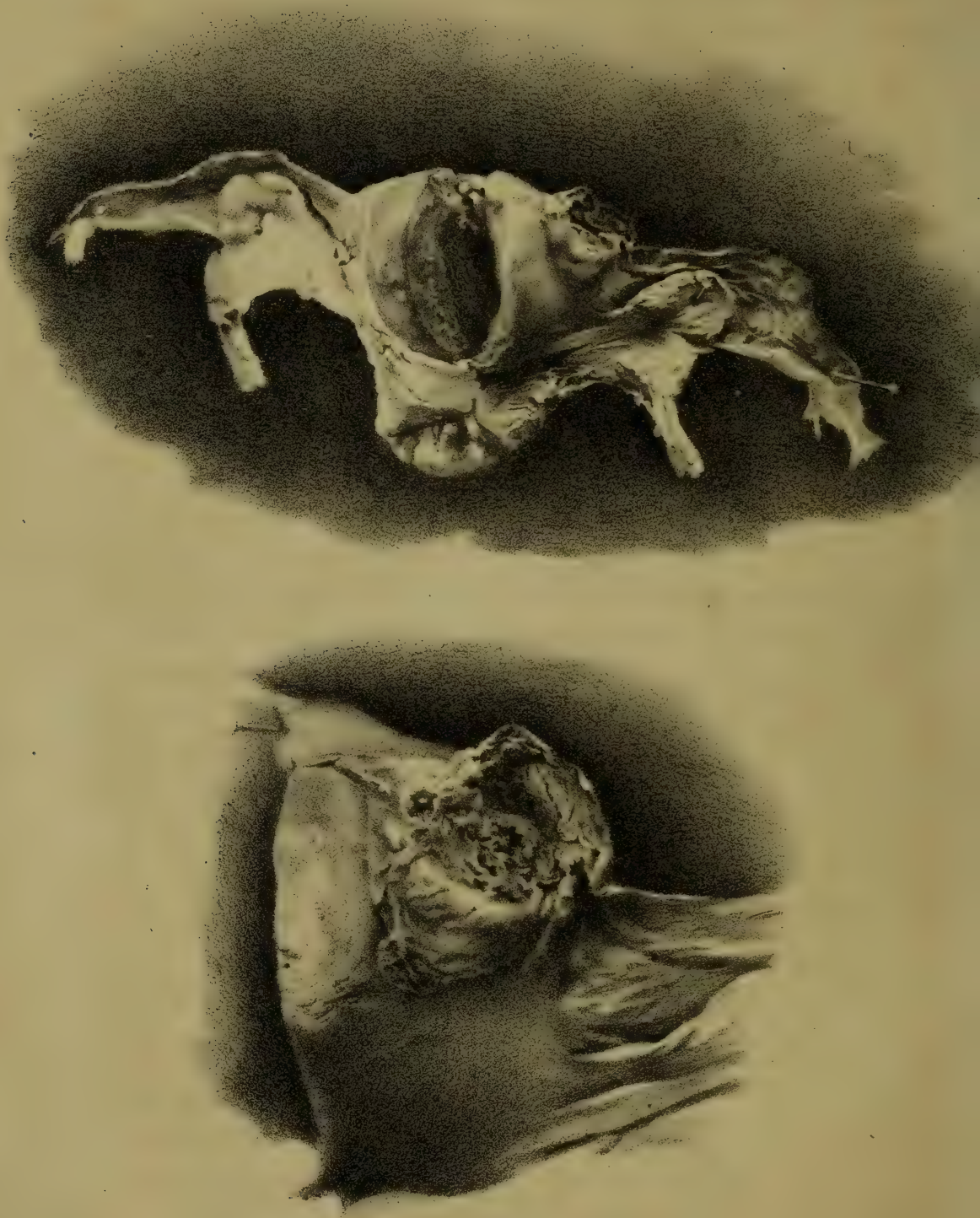
Editorial Department—
Comments on Extra-Uterine Pregnancy..... 2
Salutatory..... 25
State Medical Society.....26, 223
Charlatanry.....55, 117
Sanger's History of Prostitution, Review of..... 85
Liquor Cinchonæ Hydriodatus..... 89
Convention of Teachers..... 155
Medical Education..... 186
Commencement of University of Louisville..... 188
Kappa Lambdas..... 412
Medical Journals..... 452
Sensation Answers to Correspondents..... 453
American Medical Association 476, 325
British Medical Association..... 544
Review of Transactions of Indiana Medical Society..... 548
Gleanings from Foreign Journals.. 637
University of Louisville..... 386
Appointment of Superintendent of City Hospital..... 317
Letter from Junior Editor..... 387
Reply to Dr. Fry's Communication 733
Extra-Uterine Pregnancy..... 1
Epidemiological Society..... 673
Epidemics of Kentucky, Report on.....647, 679
Epidemic Anginose Affection in Troy 43
Erysipelas in Paris Hospitals..... 96
Fracture of Femur..... 391
Formulæ employed at Lyons..... 517
Fæces and their constituents..... 44
Foundling Hospitals of Russia..... 48
Fistula in Ano..... 190
Goitre in Province of Perm..... 252
Glycerole De Gourdon..... 59
Hernia, Statistics of.....97, 129, 161
Honor to whom honor is due..... 475
Hemorrhoids, Treatment of..... 539
Hypophosphite of Quinine.....272, 541
Hip Joint, Case of injury of..... 261
Hydrophobia..... 710
Infringements of U. S. Pharmacopœia 37
Jasper's Itch Ointment..... 61
Kamala..... 28
Lead Poisoning, Case of..... 389
Liquor Cinchonæ Hydriodatus..... 123
Liquor Cinchonæ Hydriodatus Cum Ferro..... 124
Marquam, Dr. H. P., Trial of..... 359
Medical Science in Europe and the United States, State of..... 592

PAGE

Matters discharged by Vomiting 46
Malignant Pustule..... 120
Mortality of Cities of Providence and New York..... 74
Nervous System.....14, 67, 235
New Researches on Alcoholic Fermentation 63
Outlines of Clinical Cases..... 433
Ozone and Influenza..... 84
Ovariotomy, Report on.....455, 487, 551
Opium in large doses..... 33
Oedematous Laryngitis..... 575
Observations on Puerperal Diseases. 350
PHARMACEUTICAL DEPARTMENT—
Liquor Cinchonæ Hydriodatus..... 123
Liquor Cinchonæ Cum Ferro..... 124
Pilulæ Ferri Iodidi..... 124
Citrate of Iron and Magnesia..... 126
Cod Liver Oil Jelly..... 127
Citrate of Iron and Strychnia 182
Oxide of Silver in combination with Oxidizable Substances 182
Nitro Glycerine..... 256
Caustic Cylinders of Gutta Percha and Chloride Zinc..... 258
Frauds in Flour..... 278
Adulteration of Lac Sulphur..... 279
Antacrid Tincture of Falk..... 356
Adulteration of Glycerine..... 409
Steel Wire 410
Bark of Alianthus as a Vermifuge. 447
Glycerine in Pruriginous Affections 447
Caffein, Experiments on action of. 447
Dulcamara and Solanine 573
Revulsive Treatment of Chronic Affections of the Eye..... 574
Powder for Nocturnal Incontinence of Urine..... 575
Mixture for Whooping Cough 509
Stramonium..... 542
Iodide of Sodium..... 604
Wild Cherry Leaf Water 634
Palatable Medicines..... 737
Pneumonia, Treatment of..... 248
Preservation of Subjects..... 220
Proceedings of Kentucky State Medical Society..... 226
Proceedings of Society for Advancement of Natural Sciences, 29, 221, 72, 214, 41
Proceedings of American Pharmaceutical Association..... 675
Proceedings of Twelfth Annual Meeting of American Medical Association..... 306

PAGE

Proceedings of Medical Society of London.....723, 768
Proceedings of Obstetrical Society of London 702
Proceedings of Obstetrical Society of Edinburgh..... 706
Pathology of Thymus Gland..... 581
Physiological considerations of Epileptic Attacks.....583, 616
Popular Remedies of Russia..... 353
Pulmonary Phthisis..... 504
Punishment of Adulteration in France..... 317
Propylamin..... 183
Prolapsus Uteri 185
Prolapsus of Rectum during Lithotomy 96
Rare Obstetrical Case..... 177
Regeneration of Broken and Resected Bones..... 225
Resume of College Clinique..... 423
Rupture of Vagina..... 743
REVIEWS—
Prof. Seymour's Address..... 93
"Nature and Art"..... 203
History of American Medical Association..... 240
Corson on Examination of Chest.. 318
Anæsthesia 403
Dr. Flint's Address..... 438
Science and Success..... 471
Solvent to Woody Fibre..... 128
Seeds of Carduus Mariæ in Uterine Hemorrhage..... 154
Suits for Mal-Practice, Report of Committee on.....193, 229, 293, 379
Sick Headache..... 175
Suit Homoeopathic in France..... 116
Schirrhus Pilorus, Case of..... 751
Temperature of Earth..... 53
Tetanus, Traumatic, treated by Chloroform..... 139
Tetanus, Traumatic, treated by Atropia 143
Tetanus, Cases of..... 400
Trial of Dr. H. P. Marquam 359
Treatment of Sprain by Friction and Shampooing..... 159
Treatment of Puerperal Diseases by Opium and Turpentine..... 160
Tracheotomy for Pebble in Windpipe 191
Tracheotomy in Croup..... 752
Tracheotomy, Importance of position in 678
Value of an Eye..... 349
Veratrum Viride in Enteritis..... 149



METCALFE'S CASE OF INTERSTITIAL PREGNANCY.

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Semi-Monthly Medical News.

VOL. I. LOUISVILLE, KY., JANUARY 1, 1859. NO. 1.

CASE OF EXTRA-UTERINE PREGNANCY.

[By C. K. METCALFE, M.D.]

The subject of this report was a free negress, aged twenty-six, of vigorous constitution, and in the enjoyment of previous good health.

She had been twice married, and had borne two children at full period, and had suffered four abortions — the period of pregnancy, at which the abortions occurred, was not ascertained. I saw her first about five P. M., of 9th December, 1857. The history of the attack then obtained, was this:

About nine o'clock in the morning of the same day, she had felt sudden abdominal pain, and soon after became so faint that she would have fallen but for the support of her husband. She was laid upon a bed, and partly recovered from her fainting condition. The pain in the abdomen, however, continued, and increased in intensity. She had taken no remedies except an unascertained quantity of tincture of camphor. I found her with all the symptoms betokening prostration from hemorrhage: her countenance was pallid — her lips and mucous membrane of mouth blanched — her pulse feeble, scarcely perceptible, and surface cold and clammy. She was, also, very restless, tossing about in the bed; had vomited, and was somewhat incoherent. She had menstruated five or six weeks previous to this time. I at once ordered stimulants and anodynes, which were freely administered, and from the influence of which she seemed to rally; but on my return, after a very short absence, I found her sinking rapidly and hopelessly.

She died at eleven o'clock, about fourteen hours after the sudden expression of pain in the morning.

The following morning, with the assistance of Drs. S. N. Hall, J. C. Metcalfe, and W. E. Gilpin, I made an autopsy. On opening the peritoneal cavity, it was found filled with coagula of blood, and on instituting search for the cause of the hemorrhage, we discovered that a rupture had occurred in the right Fallopian tube, near its connection with the uterus. The rup-

ture was probably the fourth of an inch in extent, and on increasing the size of the opening, a cavity was found as large as a chestnut, involving both the tube and proper tissue of the uterus. In this cavity the mouths of several small vessels were found to terminate. Near the opening of this cavity, we found a membranous looking body, which had evidently been displaced from it, and which was undoubtedly an ovum; unfortunately it was lost. The uterus was lined with decidua; it was not noted whether the mouth of the uterus was occupied by the usual gelatinous plug of pregnancy or not.

The following measurements of the uterus as now obtained, after a year's immersion in alcohol, may interest the reader:

Vertical diameter of uterus	3⅝ inches.
Transverse diameter of uterus	2¼ "
Walls (in thickness) uterus	⅞ "
Transverse diameter of rupture	1¼ "
Antero-posterior diameter of rupture	½ "

The rupture is at the fundus, a little posterior to the mesial transverse line of the organ, and embraces the structure of the uterus, and about four or six lines of the right Fallopian tube. No direct communication exists between the lesion and the cavity of the uterus; the Fallopian canal is easily traceable into the part ruptured. The ovary of the right or corresponding side, is fully one third larger in its antero-posterior diameter than the opposite one. The cavity of the uterus is lined by a mucous or deciduary membrane.

The larger diagram exhibits the uterus in its posterior aspect, reduced in size: the smaller figure is an illustration of the cavity of the ovisac, of its true size; both plates are faithful representations of the original. The pathological specimen is deposited in the museum of the University of this city, to which it was presented by Dr. Metcalfe.

Extra-uterine pregnancy is an accident of sufficient frequency to be practically important to all physicians who earnestly seek to obtain the means of recognizing and alleviating every pathological condition threatening the safety of the parturient female. Two inquiries naturally suggest themselves to the mind of one who undertakes to investigate this subject. First, is it possible to gain such knowledge of the phenomena attending pregnancy exterior to the uterine cavity, as to enable us to diagnose the condition in season to institute measures for the security of our patients? Second, if an authoritative standard of diagnosis be established, what resources

are within our call which promise relief to the subjects of this accident? To enable us to arrive at some conclusion with regard to proper answers to these inquiries, we have collated some cases with their most prominent symptoms and autopsies. Many more might have been obtained, but we supposed these sufficient to present an adequate study of the subject.

CASE 1.—*Reported by* HEISKILL, *in American Journal of Medicine.—Point of development unknown.*

Symptoms of early periods of pregnancy not reported. She had borne six children previous to this abnormal pregnancy. This fœtus she retained for forty years, and died, aged 70, of dysentery. Post-mortem observation revealed the fœtus in a remarkably natural state, and enclosed in a fibro-cartilaginous cyst.

CASE 2.—*Reported by* NORMAN, *in Med. Chir. Trans.—Point of development unknown.*

Early symptoms not reported. Fœtus was extracted through incision in posterior wall of vagina. The patient died, and her death was attributed by the operator to the fact that a rupture of the funis prevented his finding the placenta to remove it.

CASE 3.—*Reported by* TUEFFARD, *in Ranking's Abstract.—Point of development unknown.*

No abnormal symptoms are reported prior to sixth month, at which time, a violent upward movement of child was followed by its descent into the iliac region of the left side. From this time all movements of the fœtus ceased, and the female was subject to excessive abdominal pain and copious hemorrhage. On performance of gastrotomy two cysts were found, one enclosing the trunk and limbs, the other the head of a fœtus. The cysts were removed, and the patient completely recovered. She had been pregnant five times previous to this abnormal pregnancy—four terminated in premature labor at seventh month, and one went to full term.

CASE 4.—*Reported by* PAYAN, *in Gazette Medicale.—Point of development, interstitial.*

An unmarried female, in the third month of her second pregnancy, was seized with sudden abdominal pain and thirst. Prostration and death ensued in a few hours. The uterus was of usual size at third month, and lined with decidua. Imbedded in its proper tissue at the fundus, but not communicating with its cavity, was found an ovum ; and the rupture of its cyst had occasioned hemmorrhage, which produced the death of patient.

CASE 5.—*Reported by* ARMSBY, *in Trans. N. Y. Soc.—Point of development unknown.*

Symptoms during pregnancy, entirely normal. At eight and a half months, uterine pains occurred after a fright. After a year and a-half of severe suffering her health improved, and she retained the fœtus for fifty years without much discomfort. Her catamenia continued until forty-five years of age. At death, the fœtus was found in a state of adipocere, and enveloped in fibro-cartilaginous cyst.

CASE 6.—*Reported by* WATTS, *in the N. Y. Jour. Med.—Point of development, tubal.*

Only pregnancy of patient. No abnormal symptoms reported. After attaining full term, labor pains occurred, but passed off without delivery. Remained in good health for nine years, then purulent discharge occurred from rectum, with hectic fever and prostration. Her condition being ascertained, the remains of fœtus were successfully removed by abdominal section.

CASE 7.—*Reported by* HARBERT, *West. Jour. Med.—Point of development, interstitial.*

The patient, in the sixth month of her second pregnancy, complained of sense of weight and pain in right side ; nausea, urgent thirst, tender and tympanitic abdomen, with sanious discharge from vagina followed. Death on ninth day. Autopsy revealed a large coagula in peritoneal cavity, ovum with membranes entire, exterior to a cup-like cavity in fundus of the uterus in which the placenta was attached. Patient had died from hemorrhage and peritonitis, induced by rupture of this sac. Interior of uterus lined with decidua.

CASE 8.—*Reported by* MCCULLOCH, *Brit. Amer. Jour.—Point of development, probably tubal.*

During the period of utero-gestation with second child, suffered severe pain in the right iliac region. At ninth months, pain became less severe ; milk flowed from breasts, lochial discharge appeared. Seven months after this, thirty-six pounds of fluid were removed by tapping. At the expiration of another seven months, gastrotomy was performed by enlarging an opening at the umbilicus, from which some debris of fœtus had escaped, and decomposed child of mature development removed. Patient recovered.

CASE 9.—*Reported by* BRADLEY & ROGERS, *in N. O. Med. and Surg. Jour.—Point of development, right Fallopian tube.*

Patient, mother of six children. Six weeks after eighth conception, complained of colic, with constipation. At full period, had labor pains, which subsided without delivery. Twelve months after this, gastrotomy was performed, and a well formed fœtus of seven months development was removed from a sac formed by expansion of right Fallopian tube. Patient speedily recovered.

CASE 10.—*Reported by* JOHNSON, *Med. Examiner—Point of development, probably left Fallopian tube.*

Patient healthy and childless; had violent abdominal pain and vomiting eighteen days after menstruating; these attacks recurred. At termination of usual period of utero-gestation, had uterine pains and sanguineous vaginal discharge, which soon subsided. Twelve months after, an exploratory abdominal incision disclosed a fœtus, which was removed. Patient died of diarrhœa on twenty-fourth day.

CASE 11.—*Reported by* GORDON, *in West. Jour. Med.—Point of development unknown.*

Patient complained in early stage of tenth pregnancy of *stinging sensation* in right iliac fossa; soon perceived a tumor of the size of a plum in the location of this sensation. This tumor increased in size, and with its increase the stinging feeling was converted into a sensation of absolute pain. At seventh month of gestation this tumor ceased to enlarge. Soon after, the patient was delivered of a still-born child, but the tumor above described remained unchanged. After this, her health improved, and she gave birth during a period of twelve years to five living children. At the sixth month of her sixteenth pregnancy, premature labor came on, and was found to be complicated by a pelvic tumor. This was diagnosed to be an extra-uterine fœtus, and was removed by an incision through the posterior wall of the vagina; labor was then accomplished readily, and the patient soon recovered.

CASE 12.—*Reported by* CRAGHEAD, *in Amer. Jour. Med.—Point of development, left Fallopian tube.*

Patient had borne two living children. Was seized with severe abdominal pain near third month. Eighteen days after, was found in collapsed state, pulse scarcely perceptible; tossing about, and complaining of distressing sensation in lower part of abdomen. Abortion of three months fœtus, and death ensued. Autopsy discovered a large quantity of coagulated blood in peritoneal cavity, and in an enlargement of left Fallopian tube a fœtus of equal development to that expelled from the uterus; hemorrhage had proceeded from vessels of this sac.

CASE 13 — *Reported by* PETERS, *in Medical Examiner. — Point of development, upper part of the Bladder.*

Patient had previously borne seven children — supposed herself three months pregnant, but had irregular appearances of menses twice during that period; was seized suddenly with hypogastric pains, faintishness; was found by physicians with cold extremities — barely perceptible pulse, pallid lips; pressure over seat of pain did not increase it — mouth of uterus so patulous as to readily admit finger — death in two hours. Autopsy: fifteen pints fluid blood in peritoneal cavity — embryo three inches in length and perfect in form — found partly attached to anterior upper part of bladder — partial rupture of this attachment produced the fatal hemorrhage. No decidua in uterus; right ovary enlarged and Graafian vesicle filled with brownish fluid.

CASE 14 — *Reported by* WAGSTAFF, *in the Medico Chir. Review — Point of Development, left Fallopian Tube.*

Patient had borne three children — twins once — was, while walking, suddenly seized with acute abdominal pain — was found on visit with pallid countenance, accelerated and feeble pulse, precordial anxiety — lancinating abdominal pains — constant tenesmus of rectum and bladder, and frequent vomiting — death in a few hours. Autopsy: peritoneal cavity contained near five pounds of blood, in which, after careful search, was found an embryo of seven or eight weeks growth — a rupture as large as point of finger was discovered in a sac formed by expansion of left Fallopian tube. This sac was size of a pigeon's egg. and contained ragged placenta which partly hung from rupture; walls of uterus thickened and cavity lined with decidua.

CASE 15.—*Reported by* FILLITER, *in London Lancet.—Point of Development unknown.*

Patient had borne one child and had had two abortions; at third month of pregnancy had sudden abdominal pain, regarded as labor pains, but unattended with vaginal discharge; after this symptoms of peritoneal inflammation ensued; after nine weeks got about but with dragging sensation and tumor in iliac region, which latter increased. Six months after, the debris of a fœtus were discharged per-anum — patient recovered.

CASE 16.—*Reported by* FILLITER, *in London Lancet.—Point of Development, left Fallopian Tube.*

A healthy but intemperate woman was seized, when three months pregnant, with bilious vomiting and abdominal pain, increased by pressure — at night fell with some violence against a chair; the following morning was found dead. Autopsy: four pounds coagulated blood removed from peritoneal cavity; fœtus between 2nd and 3d month of development — was found projecting into abdominal cavity through a rent in left Fallopian tube, near its attachment to uterus.

CASE 17.—*Reported by* RAMSBOTHAM, *in London Medical Gazette.—Point of Development unknown.*

A healthy unmarried female, early in the third month of pregnancy, was seized with abdominal pain, appeared to yield to treatment, but in six days reoccurred with increased violence — collapse supervened, and patient died in thirty hours. Two quarts of blood were found in abdomen, and fœtus enveloped in membranes at about nine weeks development — uterine cavity lined with decidua and mouth closed by plug.

CASE 18.—*Reported by* DENNY, *in American Journal Medicine.—Point of Development unknown.*

Patient had borne one healthy child — was not healthy — subject to attacks of abdominal pain and constipation. At the ninth month of pregnancy, which had been attended by no unusual phenomena, she had abdominal pains which she declared to be located in the bowels and not in the uterus; these subsided and a "rolling movement," when she turned from one side to the other, succeeded. More than one year after this she died from exhaustion, and the fœtus was found encysted and reduced to adipocere.

CASE 19.—*Reported by* WHINERY, *in American Journal of Medicine.*

Patient had menstrual irregularity and dropsy prior to marriage, after marriage bore two children; after birth of second child discovered tumor in right side, with sensation of motion in it. One month after this had severe abdominal pains, interrupting like labor pains; these subsided after week's duration — became again pregnant and bore at full period a living child, after this delivery found that the abdominal tumor had enlarged and still gave evidence of motion. This last sensation of movement continued for eighteen months, then ceased and tumor seemed to become flabby and spread out over abdomen — the diagnosis of Dr. Whinery was intra-uterine and extra-uterine fœtation co-existing with conception of second child; gastrotomy was carried so far as to lay open the fœtal cyst, from which it was afterwards removed — patient recovered.

CASE 20.—*Reported by* W. H. DONNE.—*Point of Development, right Fallopian tube.*

Patient's symptoms of early pregnancy not reported — died at third month of hemorrhage from rupture of sac.

CASE 21.—*Reported by* L. ROGERS.—*Point of Development, right Fallopian tube.*

Had borne two children; died from hemorrhage into peritoneal cavity, occasioned by rupture of sac between first and second months of third pregnancy; survived first symptom of rupture about thirty hours.

The signs of extra-uterine pregnancy in its early periods, have not been found to differ from those of normal pregnancy: the menses are arrested—the abdomen enlarges progressively—the process of lactation is instituted, and by none of the ordinary marks of pregnancy can a differential diagnosis be established. We are satisfied, however, that the sensational phenomena will be found, as a rule, to differ essentially. But physicians are so often consulted by pregnant females in relation to real or supposed differences between the sensations of present and past pregnancies, that they are accustomed to attach but little consequence to such complaints; still, it is to this point we are satisfied we must look for the first clue to the abnormity in question. If, for example, a female be found

with arrested menses and all other usual indications of pregnancy, and the symptoms be accompanied by expressions of suffering unusual in character and position, it should suggest to the mind of the examiner the possibility of extra-uterine fœtation. The sensation of pain complained of under these circumstances, is described as "stinging," pungent and lancinating in its character—it is persisting, though often marked by paroxysms of increased severity, and is generally referred to one of the iliac fossæ, in a space between the ovary and uterus, since here is the point of development of the tubal or most common form of extra-uterine pregnancy. Should this pain be found to be connected with circumscribed tumefaction, the suspicions of extra-fœtation amount to a strong probability that it does exist. These diagnostic points relate to the earliest periods of pregnancy. Later in its progress, patient and careful examination by abdominal palpation — by vaginal and rectal touch — ballottement and auscultation should give a correct idea of the true condition. How much assistance the speculum is to afford in determining these points of difficult diagnosis, is yet to be shown. It is not impossible that the early sign of normal pregnancy pointed out by Whitehead — "the circular and puckered appearance of the os-uteri" — may not be found to exist in extra-uterine fœtation; though in all those cases in which the point of fœtal development was from the uterus or its appendages, so as to involve uterine enlargement, as a necessity we should expect this change from the linear to the circular form in the lips of the uterus. Of course the final and positive test of the character of the pregnancy would be in the introduction of the uterine sound, but a conscientious physician would be extremely cautious about resorting to means of diagnosis, which would result in the destruction of the normally situated embryo.

After having detected the existence of extra-uterine pregnancy, what course shall we pursue? We think the obvious indication in the early periods of this abnormal gestation is to arrest the further development of the embryo. If we can achieve this, the cyst containing the blighted ovum may be retained an indefinite period without danger or discomfort. This point may be found to be feasible in the manner proposed by Brachetti, and successfully practiced in one case of destroy-

ing fœtal vitality by electro-puncture. Whenever the abnormal pregnancy has extended over a considerable period, and the patient has suffered no very great inconvenience, we would recommend non-interference; but, if her life was rendered wretched by continual recurrences of pain, or the harassment of a rolling abdominal mass, we think the chances to be afforded by gastrotomy should be strongly insisted on to the patient. Experience has shown that this operation is not so successful at those periods when nature seems by strong parturient efforts of the uterus to be striving to rid herself of the incumbrance, as at other times when no such perturbation exists; consequently discrimination should be exercised in the selection of a season for operating. In such cases as the one which suggests these remarks, there is but little time for the medical adviser to decide upon expedients. It is more than probable that under any course of procedure, these instances of ruptured ovisac in extra-uterine pregnancy, will continue to prove almost uniformly fatal. Their proper treatment is wholly prophylactic.

We would be glad to pursue this interesting subject, but have already carried our remarks beyond the proposed limits.

FEMORAL ANEURISM — TREATMENT BY COMPRESSION—LIGATURE OF ILIAC—GANGRENE—DEATH ON TWENTY-SECOND DAY.

[By J. B. FLINT, M.D., Professor Clinical Surgery, University of Louisville.]

There are few sections of practice, in regard to which the experience of surgical practitioners, in this region of country, is so limited as Aneurism; and it is especially desirable, therefore, that whatever opportunities of becoming acquainted with this formidable disease occur to any of them, should be made available to all, so far as they may be by a faithful report of the cases.

Not only may such communications throw light upon the path of practice, and supply hints for successful treatment; but, if prepared with sufficient particularity, regarding the apparent cause and the history of the disease, may contribute towards an explanation of that remarkable pathological immunity of our people, exhibited in the infrequency of true Aneurism amongst us.

About the middle of Nov., 1857, a medical friend placed in my charge, a patient presenting this disease in the femoral artery. He was a man of medium stature and development, aged 57 — an Englishman by birth, by occupation a stone-cutter, and, for many years, addicted to excessive and intoxicating indulgence in alcoholic drinks. None of his kindred, as far as he knew, had ever been the subjects of such affections.

The locality of the Aneurism will be indicated, with sufficient precision, when it is said to have occupied "Scarpa's triangle," on the right extremity. It had been noticed by the patient so long as two years before it was submitted to treatment, having commenced, however, unconsciously to him, and without any probable cause, that his memory could supply. When first observed, it was not much larger than a nutmeg, and had never been attended by pain or other inconvenience, until within a few weeks before it came under my notice; then the tumor was prominent, oval, about three inches in diameter, and exhibited, in a marked and unequivocal degree, all the characteristics of the class of affections to which it belonged. There was constant uneasiness in and about the tumor, and occasionally paroxysms of violent pain throughout the limb.

Every consideration pertinent to the question of treatment, suggested to me the adoption of the method by compression, which has been introduced into the surgery of our day, in so favorable a manner, by distinguished practitioners of Dublin. It was rendered especially applicable to the present case, by the resolute temper and readiness for intelligent co-operation exhibited by the patient.

An apparatus was prepared, under my direction, consisting of a stiff steel arc, representing the semi-circumference of the patient's pelvis, having attached to its posterior extremity a broad pad fitted to apply itself to one side of the sacrum, its anterior portion being pierced with a number of holes, fitted to receive a screw, which commanded an elliptical pad, to be applied to the vessel. When properly adjusted, this instrument enabled us to apply pressure of any degree that was desirable, to the femoral artery, just as it emerged from the pelvis below Poupart's ligament; and it was found that this could be done without involving other vascular or nervous trunks in the vicinity, to any mischievous or perceptible extent.

The patient having been confined to the horizontal position, and suitably regulated in matters of diet, for several days, the compressor was first applied, Tuesday, November 27th, at five o'clock, P. M. A few turns of the screw served to arrest all visible pulsation in the tumor, although, to the touch, there were movements still perceptible in it, due to the passage of a diminished current of blood. Under this satisfactory effect of the application of the compressor, the patient was left for the night, advised of the conditions which might require either a relaxation of the pressure, or a total removal of it.

Wednesday, A. M. The pressure having been kept up about half the night, without any pain or discomfort at the point of its application, the patient, finding himself suffering much with his old pains in the tumor and the limb, removed the apparatus, and has been without it since. He observed, at the time of removing it, that a great change had taken place in his disease; he could discover no pulsation then, nor has he felt any since; and at the present time, he has little or no pain whatever. On examination, the apparatus being still off, the pulsation in the tumor was, indeed, very feeble and indistinct, and the aneurismal sound quite imperceptible; but, on the other hand, it seemed to be more tense and voluminous than before, and the integument over it presented a dusky hue, where there had previously been no discoloration whatever. There was no swelling of the limb below the tumor, no numbness, nor any change of temperature.

The compressor was re-applied, with a little additional force.

Twelve o'clock, M. Pressure has been kept up steadily. When removed, for examination, the pulsation in the tumor was still less; but there was no diminution in the magnitude or tension of it. The patient had suffered two or three spells of severe pain in the lower part of the limb, represented as passing round the knee joint, or just above it. Pressure re-applied as before.

Six o'clock, P. M. Pressure has been without interruption, and the aspect of the case much as at noon.

Thursday, A. M. The patient passed a comfortable night — slept most of the time — pressure persistive. The size of the tumor and the dusky discoloration of its surface apparently unchanged.

Twelve o'clock, M. Much the same—no pain.

Six o'clock, P. M. Patient has been comfortable all day—pressure persistive. On relaxing it now, for the purpose of examination, the pulsation in the tumor is scarcely perceptible, and the tension of it seems to be less. About five and twenty drops of laudanum have been taken in the course of the day, not on account of pain, but for the purpose of determining quiescence of the bowels. The tumor, although unchanged in volume and appearance, is not painful now, and is less tender than it was.

Friday, A. M. Report of the night very favorable—patient slept most of the time—had no pain—pressure persistent. When apparatus is removed, the pulsating movements in the tumor are with difficulty perceived—limb, in other respects, well.

——— *P. M.* In the course of the day, there have been two spells of severe pain in the lower part of limb. At time of visit, no complaint at all, and on examination, things were much as in the morning.

Saturday, A. M. Report of night very bad—much pain in all parts of the limb—the apparatus had become intolerable early in the night, notwithstanding the free administration of opiates, and was removed. A feverish excitement had taken the place of the tranquil habit, both physical and mental, which the patient had hitherto exhibited, and his countenance was anxious and disturbed. He complained of general pain and sense of numbness throughout the extremity. On examination, the tumor was destitute of pulsation, but larger, painful, tender, and more deeply discolored. The limb was swollen throughout, with much œdematous enlargement above and about the seat of disease, extending, indeed, in a degree, even, above Poupart's ligament; but there was no observable loss of temperature in any part of it.

It was quite evident that the treatment by compression, which had promised so well, for a time, must now be abandoned, and that the only alternative was in the speedy ligation of the external Iliac.

At eleven o'clock, December 1st, this operation was performed, in the presence of a number of medical friends, for whose counsel and aid in this trying emergency of practice, I was truly thankful.

The incisions made for exposing the artery were those recommended by Sir Astley Cooper, and were found to be altogether satisfactory, enabling me to bring the vessel into view, at the proper point, and to apply the ligature with the utmost facility and precision, about mid-way between the origin of the internal Iliac and the Epigastric. No vessels were divided in the operation requiring a ligature, and not more than a couple of ounces of blood were lost. The wound was united by sutures and adhesive straps, but no bandages were applied; and, when returned to his bed, the patient was directed to repose rather on the left side, so as to protect the superficial vessels of the diseased side, as far as possible, from pressure. When the anesthesia, to which he had been subjected, had passed off, he complained of no pain whatever referable to the operation. The affected limb was wrapped in cotton batting, and he was placed in bed, with directions to have a little soup as soon as he could take it, and an opiate pro re nata.

Immediately after the application of the ligature, the temperature of the diseased limb was sensibly higher than that of the sound one; but, at the time when I left him, some half an hour afterwards, they were, in this respect, alike.

Six o'clock, P. M. Patient has been free from pain since the operation, with the exception of a little about the ankle; but the whole limb has felt numb, and his wife reports that, for a while, it was quite cold. At the time of visit, however, there was a slight reduction of temperature in the foot, while other parts of the extremity were as warm as those of the sound side. No sleep — directed light nourishment and an opiate.

On Sunday morning, he was comfortable; in the course of the night, the temperature of the foot had fallen, but has improved, and is now nearly like that of the other side — no pain whatever, in the wound, nor in the seat of disease.

From visit to visit, for two or three days, this fluctuation in the temperature of the whole extremity, and especially of the foot, was the most important matter of observation in the case; as to sleep, appetite and freedom from suffering, the report generally being favorable. There was occasionally an opiate administered, and once an enema of warm water.

On Wednesday, however — the fourth day after the operation — these struggles of vitality were at an end, in the extrem-

ity of the limb; about one third of the foot was cold, insensible and shriveled. Dry gangrene had established itself on the part, and extended itself very gradually, from day to day, until it reached a point a few inches below the knee, where it remained stationary for a number of days, before any of the processes tending to a separation of the dead and living parts exhibited themselves. In the mean time, only partial union had taken place in the wound of operation — a failure to be expected considering the infiltrated condition of the tissues through which it was made — and an unhealthy suppuration was going on in the open portion of it. The patient bore up under this gangrenous invasion remarkably well, and was much more contented and hopeful, in his condition, than his surgeon could be.

The ligature separated on the seventeenth day after the operation, the event being attended by the sudden discharge of an ounce or two of blood; the hemorrhage ceased spontaneously. In the course of the following two days, there were several similar discharges from the orifice left by the ligature, but moderate pressure and cold at once suppressed them. After the second day from the separation of the ligature, there was no more hemorrhage.

About the 20th of the month, ulceration and its attendant phenomena began to take place at the line of demarkation of the gangrene, and immediately thereon, rapidly the constitutional condition of the patient declined. He became feverish, sleepless, anxious — poisoned, no doubt, by the noxious products of diseased action developed in the process of separation going on below the knee. Exhausted by the various casualties and complications of his disease, he died on the night of the 22d of December.

Dissection, on the following day, showed first, that Scarpa's triangle and neighboring intermuscular spaces were filled with sanious fluids and broken down coagula; this fetid, semi-fluid compound being crowded up under Poupart's ligament, even into the pelvis — the quantity of it might have been measured by pints. Second, that the artery was neatly divided by the ligature, the proximal portion of the section being firmly sealed up, and effectually guarded by coagula — the distal portion exhibiting a very minute opening through which the blood made its escape, constituting the hemorrhages that occurred

after the separation of the ligature. The interior coagulum, moreover, in this portion of the vessel was small and imperfectly organized.

An intelligent medical reader of the above report will not fail to connect the fatal termination of the case directly with the disaster of the 1st December, by which the *fusiform* aneurism became converted into a *diffused* one; and there will be a general agreement with the narrator, I believe, in attributing this unpropitious event rather to the augmenting stress of the disease, which was marked and progressive for several weeks before any treatment was employed; and which, indeed, had driven the patient to invoke the interposition of art, rather than to any special agency in the catastrophe, exercised by the means first employed for his relief. While it is highly probable that the rupture of the sac was precipitated by the rapid accumulation of consolidated fibrin, it is an interesting question, in a comparative view of the two methods — compression and ligature — as to which of them would be most likely to lead to such a result, if either more than the other — a question for the solution of which we are not prepared by sufficiently numerous observations.

Doubtless the aneurismal sac, immediately after the application of a ligature above it, becomes comparatively empty, by the transmission of its fluid contents to the vessels below, while none re-enters from above, and so becomes in better condition to bear with impunity the accumulation of solid matter, which, under favorable circumstances, soon takes place; while, on the other hand, as a matter of fact, in several of the cases of cure by compression, the consolidation of the contents of the sac has been much more sudden and complete than in any reported case of treatment by ligature. Certainly, the new method, first applied in the present case, seemed to be fulfilling the indications admirably, for several days; and there is no good reason to believe that the casualty which compelled its abandonment, would have been averted if the ligature of the Iliac had taken its place in the first instance.

But, however this may be, from the moment the unfortunate transformation of disease took place, all the probabilities of the case changed sides, and only the faintest hope could be indulged from any subsequent management of it whatever.

Because of the age and dissolute habits of the patient, and the duration and progress of the disease, all professional art and assiduity were necessarily expended upon it in vain.

The question of amputation was more than once entertained, after the establishment of gangrene; but, in view of the unpropitious state of things at the upper extremity of the limb, none of those probabilities of advantage which justify such a resort, appeared to exist; and the revelations of the autopsy abundantly vindicate the conclusions which determined this important question of practice.

THE NERVOUS SYSTEM.

[By B. M. WIBLE, M.D.]

I propose to present to the readers of the "News" a series of articles on the physiology of the Nervous System, and its relation to practical medicine. To accomplish the object intended, it will be necessary to allude to facts and principles which may be familiar, but this is requisite in order that I may be understood.

Since the discoveries of Sir Charles Bell in 1825, of the compound functions of the medulla oblongata and the medulla spinalis, the nervous system has claimed extraordinary attention from physiologists. Among the results of their investigations, I regard those of the late Dr. Marshall Hall as most important in their application to practical medicine. I shall adopt, in these articles, his nomenclature, and indeed, to a great extent, his doctrines; reserving, however, the right to differ with him in some of his deductions, and to present others promulgated by more recent physiologists.

A nervous system consists, first, of *centres;* and second, of a conducting material to connect the centres with distant parts.

1st. By a nervous centre is meant a structure which generates nervous influence. It is composed of vesicular matter of a grey color, and is that portion of nervous tissue generally termed cineritious. In some of the lowest animals but a single centre is found (as in the *linguatula tænioides*), whilst in the higher animals, as man, they are numerous. Each collection of grey or vesicular matter, whether found in the

brain, in the spinal cord, or in the ganglions along the course of the nerves, may be regarded as a distinct nervous centre, and as possessing a distinct function.

2d. The conducting material connecting the centres with distant parts, is of tubular structure, and of white color, viz., the nerves and the commissures—the former connecting the centres with the muscles and the peripheral portions of the body; the latter connecting one centre with another.

The nervous system, following Dr. Hall's arrangement, consists of three divisions, viz., first, the *cerebral*, second, the *spinal*, third, the *ganglionic*. This division is adopted because the laws of action of these structures, and the class of functions which they perform, are different.

1st. The cerebral division includes all those nervous structures within the cranium, except the medulla oblongata, and perhaps some organs immediately superposed, and is composed of various centres, each of which performs independent functions. The peculiar office of this division is to manifest the psychical phenomena, as sensation, volition, and all those acts denominated mental; and it possesses the property of manifesting its functions spontaneously. The term *spontaneous* is used in contradistinction to the term excited, an attribute which belongs to another division.

Besides the commissures which connect the different cerebral centres, there are nerves which pass inwardly from the peripheral portions of the body to the brain, and others which pass outwardly from the brain to the muscles; the former are sensory nerves, the latter voluntary motor nerves. The term *sensory* is used technically, and should not be confounded with the ingoing excitor nerve of the spinal cord; and the term "voluntary motor," must be viewed as distinct from the excito motor. Many writers use the terms sensory and motor in so vague a manner, that the reader sometimes finds it impossible to determine what is meant. The cerebral division of the nervous system, although different in its functions and its laws of action from those of the other two divisions, yet has an intimate connection with them, and a manifest influence over them, as will be shown hereafter.

2d. The spinal division consists of the medulla spinalis, the medulla oblongata, and perhaps, some of the nervous struc-

tures adjacent to the latter, and is endowed with centres and conductors as in the cerebral division. The nerves leading *from* the periphery *into* the spinal centres, and those leading from the centres and terminating in the muscles, as well as the commissures which connect the different centres, belong entirely to this division, and have received designations to distinguish them from those pertaining to the brain. In addition to this mechanism the spinal division has a functional connection, and consequently, must have a structural connection with the other divisions. The anatomical nature of these connections has not been ascertained.

The offices of this division of the nervous system are various and important in the animal economy. It presides especially over the striated muscles. It calls them into activity, not spontaneously, as by volition, but in obedience to excitation. It possesses also the property of maintaining in them a state of *tension*, by which they are enabled to preserve a certain amount of fixedness, as of the sphincters, which close the various orifices.

While the cerebral division is related to the external world psychically, the spinal division is related to it physically. It connects the organism with the material world, and is concerned in all the acts of "ingestion, egestion, retention and expulsion in the animal economy," and is that portion of the nervous system through which physical agents affect the organism either normally or abnormally. It has been denominated "the physical nervous system."

The ganglionic division consists of the chain of nervous structure extending along the front of the spinal column, usually denominated the sympathetic nerve; the ganglions on the posterior roots of the spinal nerves; and the ganglions, or collections of vesicular nervous matter found in many parts of the body connected with the nerves. Each ganglion is believed to possess the power of originating nervous influence, and to possess, also, a distinct function.

Neither the laws of action of this division, nor the mode by which it is connected with conducting nerves, is understood. Its office, however, is to preside over the *non-striated muscles*, as those of the intestinal canal; the heart, the uterus, and especially the muscular coats of the blood vessels.

It is not intended, in these papers, to enter upon an inquiry as to the function of the cerebral division which would lead into the mazes of the mental phenomena, and I shall allude to it only as it influences, or is influenced by the spinal or ganglionic divisions.

As illustrative of the foregoing, I append the following, from an article which I published in the Western Journal, May 1853.

During the recent visit of Dr. Marshall Hall to our city, I had the pleasure of meeting him with a number of our physicians, when he performed for us some of those experiments from which he has educed that splendid discovery in physiological science of the distinct spinal system, and made it subservient to important improvements in pathology, diagnosis, and therapeutics.

I propose to give to the readers of your Journal, an account of the experiments made, although similar ones have been published before, and some of the profession are familiar with them.

By request, Dr. Hall made the experiments which prove the spinal cord to be the centre of all excito-motor actions, and that these are independent of sensation and volition.

A small frog was placed upon the table, and with a pair of scissors the head was severed from the body, and the latter, in a minute or two, was in a complete state of repose. Dr. Hall afterwards asked those present if they thought the frog could remain perfectly and permanently quiet, after so severe an injury, if it retained sensation and powers of voluntary motion. It was conceded that the animal must be deprived of these.

Early after decapitation, the foot was pinched with a pair of forceps, and the limb contracted slowly; the shock from the injury having temporarily paralyzed the nervous energy; but in five or six minutes when the forceps was again applied, the limb contracted actively. It was asked, why did the limb contract if the frog possessed neither sensation nor voluntary motion? It had been agreed that it possessed neither of these, and therefore, the motive power must depend upon something else.

The frog was then turned upon its back, the abdomen laid open, and the heart, lungs, and alimentary organs, and the ganglionic system of nerves removed. The foot was again pinched, and the leg contracted actively. The conclusion was obvious that the motive power did not depend upon the ganglionic system of nerves.

A circular incision was next made around the lower part of the thigh, barely cutting through the skin, which was then

stripped off towards the foot like a stocking. In pinching the limb thus denuded of the skin, no motion whatever could be elicited. In removing the skin from the leg, a small portion of it was left attached to the foot, which being pinched caused the leg to contract, but after its removal no contractions could be produced by pinching the leg below the place where the circular incision had been made. These experiments prove skin to be a point in the arc of the nervous course in these phenomena.

Next, the spinal nerves, given off to the limb (which had not been deprived of the skin, and which still retained its contractile power) were divided close to their origin in the spinal cord, and instantly the limb became flaccid, and the pinching failed to induce the least contraction.

Subsequently, the experiment was varied by destroying the spinal cord in a vigorous frog, and when the destruction was completed, which was done in a few seconds, not the least movement could be induced by pinching any of the limbs; on the contrary they were as flaccid and passive as if the animal had been dead a month.

These experiments prove the spinal cord to be essential to those excited muscular movements which are independent of sensation and voluntary motive power.

Afterwards like experiments were made upon the snake, and the independence of muscular movement from sensation or pain was clearly shown. After the snake was decapitated it was hung up by means of a cord tied around the neck, and, at first, its own motions kept up excited impressions, probably by the action of the scales upon the skin; but soon afterwards it became perfectly still. By touching it again upon the tail, or any part of the body, it would be thrown into contortions, which subsiding, the same experiments could be again and again repeated, productive of the same results.

When the snake was taken down, and placed upon the table, muscular action was again excited. It was soon, though, in repose, and would remain so permanently, unless excited by external influences, and this, it was stated, had been fully demonstrated by experiments made upon animals placed under a bell glass where the air and other disturbing causes were excluded.

In man the same phenomena are observable as in the frog or snake. In cases of paralysis of the lower extremities, where both sensation and powers of voluntary motion are lost, owing to disease, compression, or division of the spinal cord, active movements of the limbs may be produced by irritation applied to the soles of the feet, or by plucking the hairs on the leg.

The conclusion from these experiments and observations is,

that the nerves of excited muscular movement have their *origin* in the skin, mucous membrane, &c., their *centre* in the spinal cord, and their *destination* in the muscles. An arc is thus formed, having one extremity in the skin, the other in the muscle, and the centre in the spinal cord.

The *passage* of the nerve from the skin to the spinal cord is denominated the *course;* and that from the spinal cord to the muscle, the *reflex course* in these phenomena.

The nerve passing from the skin to the spinal cord is called the *eisodic* nerve, and that from the spinal cord to the muscle, the *exodic* nerve.

(TO BE CONTINUED.)

CHEMICAL AND MEDICAL REPORT OF THE WATER OF DU PONT'S ARTESIAN WELL, AT LOUISVILLE, KENTUCKY.*

[By J. LAWRENCE SMITH, M.D., Professor of Chemistry, Medical Department, University of Louisville.]

This water flows from a well bored to the depth of 2086 feet. It was undertaken by the Messrs. Du Pont for the purpose of furnishing water to the Louisville Paper Mill, but it will not answer that purpose, being too highly charged with mineral matter. The amount of water flowing from it in twenty-four hours, is 330,000 gallons, and the water is capable of being elevated by its own pressure to 170 feet above the surface; in many respects, it is one of the most remarkable wells of the kind.

The water is perfectly limpid, with a temperature of 76½ degrees, which will be invariable all the year round. The temperature at the bottom of the well is 82½ degrees.

Its specific gravity is 1.0113. The solid contents left on evaporating one *wine gallon* to dryness are 915½ grains, furnishing on analysis:

	GRAINS.
Chloride sodium,	621.5204
" calcium,	65.7287
" magnesium,	14.7757
" alumnium,	1.2119
" potassium,	4.2216
" lithium,	0.1012
Sulphate soda,	72.2957

*A more detailed report, containing many particulars that would be out of place in a medical journal, can be obtained from the Messrs. Du Pont, of Louisville.

	GRAINS.
Sulphate lime,	29.4342
" magnesia,	77.3382
" alumnia,	1.8012
" potash,	3.2248
Bicarbonate soda,	2.7264
" lime,	5.9915
" magnesia,	2.7558
" iron,	0.3518
Phosphate soda,	2.5415
Iodide magnesium,	0.3547
Bromide magnesium;	0.4659
Silica,	0.8857
Organic matter,	0.7082
Loss in analysis,	8.1231
	915.4582

GASES ON THE GALLON.

Sulphuretted hydrogen,	2.0050
Carbonic acid,	6.1720
Nitrogen,	1.3580

This water is very analogous in composition to the far-famed Kissengen water, of Bavaria, and of Blue Lick, in Kentucky.

The Blue Lick Spring, situated in Nicholas County, Kentucky, is so well known in this country that it is unnecessary to make any statements concerning it. The Kissengen Springs not being so well known, a few remarks concerning them would be in place. These springs are situated in the Northern part of Bavaria; and it is in this neighborhood that one of the Artesian Wells mentioned in this report, has been bored, but it has no relation with the springs that have rendered this place so celebrated for a number of years. Since 1821 these springs have attracted special notice, and there are no less than ten or twelve lengthy reports made upon them since that time, by the best chemists and physicians of Germany. Of the several springs in Kissingen, the most famous is the Rakoczy, and every year there are upwards of 500,000 bottles of water sent from it to all parts of the world. It is to the water of this spring that chemical analysis shows the water of the Du Pont Well to be closely allied.

Medical Properties of Du Ponts' Artesian Water.—Before making the medical report of this water, I would state that mineral waters are like other medicinal agents, only to be used

under the judicious advice of intelligent physicians. Mineral waters in the treatment of disease take a place between medical and dietetic treatment, and become eminently useful in a variety of diseases that require for their cure or alleviation the continued use of some mild and gentle remedy, that may be taken in connection with the ordinary drink and food.

Perhaps there is nothing which puzzles the physician more than the peculiar virtues of many mineral waters. After the chemist has analyzed them, they are found to contain many well known constituents, some in very small quantities; and it seems impossible, with our present knowledge, to reason fully as to what the medical nature of a mineral water will be from its chemical composition. The great value of the chemical analysis is to compare the composition of our water with another whose medical virtues are well established. It is upon this basis that the following general remarks are made, as to what we may expect from the Du Pont Artesian Well water.

Taken Internally.—The peculiar benefit arising from the use of saline waters to the mucous membrane of the stomach and digestive canal, is sufficiently well established by the daily use which both man and animal make of saline substances. If taken moderately they excite the appetite, and are looked upon as a mild and efficacious aid to digestion; in still larger doses they excite in a more marked manner the entire mucous lining of the intestinal canal, extending to the liver; and, taken, into the circulation, their effects are felt in all secretive and excretive organs, as the kidneys, etc. From what we can arrive at by the composition of this water, in connection with the known virtues of similar mineral waters, this water is certainly calculated to meet as large a variety of those diseased, who resort to mineral water for relief, as any other known spring; for the great portion of invalids using mineral waters, suffer from some derangement of the mucous membrane of the intestinal canal, or of the serous surface of the joints, embracing the various forms of dyspepsia and rheumatism. But we will proceed to specify the applicability of this water.

Dyspepsia.—In cases of dyspepsia, whether caused by irritation or weakness, the continued and judicious use of sulphur saline water frequently effects a cure, as in that relaxed condition of the mucous membrane in the stomach and intestinal

canal of elderly persons, where a very large amount of mucus is secreted without a proper portion of the other healthy secretions; also, where the stomach has been deranged by excess of either eating or drinking.

Costiveness—Is a very frequent accompaniment of the above disease, or it may arise from a torpid condition of the intestines alone, without any complication with the stomach; in either case good results may be expected from proper use of this water. But we must not be astonished if laxative effects are not produced by the water when the action of the skin is defective. The skin must first be brought into proper action by the bath or other proper treatment.

Derangements of the Liver.—When these do not arise from organic disease, but when this organ has become affected sympathetically or by its connection with the stomach and intestines, this water may be resorted to with good effect. In other diseases in which defective digestion or assimilation seems to be the prime cause, as gravel, gout, etc., the use of this water may give relief.

Nervous Diseases.—Arising from derangement in the blood or from local causes, as those violent headaches from indigestion or functional derangements of the stomach. The water removing the cause removes the disagreeable nervous symptoms.

As regards the effects of the water on mucous membranes, besides that of the intestinal canal, we are not prepared to assert anything, although the distinguished German writer, on mineral waters, Dr. Vetter, states that the saline waters at Baden-Baden, when taken internally, exert a beneficial effect on chronic catarrh, leucorrhœa, etc.

Action on the Glandular System.—It is beyond all dispute that waters containing salt have a healthy action upon the glandular system, and when there is iodine present, however small that quantity may be, continued use of the water is sure to be felt by that system. Within the last two weeks additional attention has been called to the subject by Dr. Boinet, in a communication made to the Academy of Medicine, in Paris. The doctor proposes the introduction of iodine into the daily food of persons laboring under any of the forms of this disease, such as worms, cretinism, enlarged glands, etc. Wherever iodine,* he

*Reference is made to M. Chatin's recent experiments, showing the existence of iodine in the air.

states, is abundantly diffused throughout the air, these disorders are rarely seen, and that the energy of the vital functions is in the direct ratio of the quantity of iodine existing in the animal economy. He proposes to iodize bread, cakes, sirups, etc., simply by the introduction of such plants as naturally contain iodine, namely: all kinds of sea-weeds and cruciferous plants, or else by using the water of iodized springs or salts containing the same principle. Under these forms the quantity of iodine administered is so small as to communicate no peculiar taste to the edible substance. After ten years' experience, during which Dr. Boinet has treated children specially selected by a physician of a "*Bureau de Bienfaisance*" for their scrofulous habit, he has come to the conclusion that the diet he proposes, if persevered in for some months, will not only cure scrofula but ulcerous habits, diseases of the skin, opthalmia, caries of the bones, etc. The Academy of Medicine has referred Dr. Boinet's paper to a commission composed of Drs. Chatin and Trousseau. If there be any correctness in Dr. Boinet's statement, all mineral waters containing iodine will be invested with new interest.

External Use.—The external use of this water will be doubtless found of great benefit, and if the proprietors should determine to apply fully its medicinal properties, they will have to construct proper baths. In most instances, and for the greater portion of the year, the water can be used at the temperature it has on flowing from the well; but for many purposes they will have to elevate the temperature 20 or 30 degrees.

Thus applied, sulphur saline waters are well known to be beneficial for a variety of diseases of the skin, scrofulous affections, and lymphatic tumors of every description, gout, rheumatism, etc. In several of the diseases, it would be proper to use the baths warm, as will be advised by those physicians who may direct the patients.

In addition to the above, it may be applied beneficially in many diseases of those mucous membranes that are accessible by washing or by injection, as in certain diseases of the mucous membranes of the eye, etc.

In reporting on the medical virtues of this water, I have purposely avoided any reference to those cases who have been cured, or supposed to be cured by it; for I have not traced out any of them, as I did not conceive any record of the kind

would be of much value in so short a history of the water, but I have preferred to give my opinion of its virtues from its composition and from the known virtues of similar waters. The opinions are little else than the reflections of those of physicians in this country, Germany, France, and elsewhere, who have paid especial attention to the medical properties of mineral springs, and who are engaged in giving advice on the subject.

H. R. Storer, M.D., of Boston, having been directed by the American Medical Association, at its meeting at Nashville in 1857, to prepare a Report on Criminal Abortion, with a view to its general suppression, from which duty he has hitherto been prevented by ill-health, desires the general co-operation of the profession. He has already received pertinent and valuable information from many parts of the Union, and would gladly hear from all who may be interested in the subject. For this purpose he subjoins the following inquiries;—

1. Is Criminal Abortion, whether induced by the patient herself or not, on the increase in your neighborhood?
2. Is it confined to unmarried women?
3. If it is increasing, is further silence and inaction the duty of the profession?
4. Is a general exposure of its true character, owing as it often is to ignorance, and a decided and general denouncement of its guilt, likely to increase still further the crime?
5. Is it necessary and advisable, where the laws on this subject are notoriously and fundamentally defective, for the profession to recommend their revisal and subsequent enforcement?—*North American Medico-Chirurgical Review.*

Strychnia in the Adulteration of Alcoholic Liquors.—Dr. Henri Erni, in an article in the *Peninsular and Independent Medical Journal*, denies that strychnia is ever used for the adulteration of alcoholic liquors; 1st, because it would be detected by its intensely bitter taste, which is evident when dissolved in seven hundred thousand parts of water; 2d, because of its high cost; 3d, because it is a most dangerous poison, and one which, unlike most organic poisons, can be readily detected by chemical tests. With regard to malt liquors, Dr. Erni states that this poison cannot be introduced into them together with hops, since the tannic acid, which these always contain, precipitates strychnia completely, in the form of an insoluble compound. As a substitute for hops, it would be much less likely to be employed than aloes and many other bitter drugs, on account of its high price.

Editorial Department.

From causes with which we are not conversant, and which we do not care to investigate, Louisville, with a population of eighty thousand, and centrally situated, with reference to a large field of practical medicine and surgery, has been some time without a Medical Journal, notwithstanding the fact, that, in addition to her intrinsic advantages as a city, her physicians sustain a proud position in the forward ranks of Medical Science. This, with other considerations, induced the Editors, during last summer, to institute arrangements of which this Journal is the product. Having embarked in the enterprise, we are determined, at all hazard of individual inconvenience or annoyance, to persevere, and establish, and maintain such a position for it, as will be worthy of the cause in which we have engaged, and of the city in which we live.

Our pages will be firmly barred against all matters of personal controversy. Communications, or papers, which are written for the writer, we will endeavor to exclude. Such as are written for the reader, will be sought for and welcomed. We class already among our collaborators, some of the most distinguished members of our profession, and we hope to add materially to their number.

We will receive the best European and American journals, and such matters in them as we may deem best, will be translated or transcribed. We will devote especial attention to reports of clinical lectures and cases, and the Pharmaceutical Department alone, will, we are confident, make the "News" a welcome visitor.

We have not launched our bark in ignorance of the troublous sea upon which it is to ride, nor have we anticipated an undisturbed and peaceful voyage; but we have launched it, and manned it, and equipped it, and will stand by the helm, in the calm, or amid the breakers, in peace or in war.

To maintain social and kindly intercourse with our profes-

sional brethren—to uphold the dignity of a profession we love—to discountenance quackery in whatever guise it may appear—whether in the exalted or the humble—will be aims constantly before us, and in the discharge of our duties as independent and personally responsible journalists, we intend to be as fearless as we hope to be just. We have not a public or private enemy to encounter, that we are aware of, and we will try to preserve the same pleasant relations with our brethren which now exist. Our career would, however, be an extraordinary one, if we should be entirely successful in this respect. The Millennial day for the realization of perfect peace, seems to be still prospective, and that christian duty which requires us to "turnt he other also," has not yet received a practical interpretation. Nevertheless, we are determined that our pages shall not be soiled by personalities, or their value diminished by useless polemics.

We will, in our next number, begin the publication of the reports read before the State Medical Society, at its last three sessions—the committee of publication having been unsuccessful in procuring funds to meet the expenses of their separate publication. Each member of the society entitled to copies, by payment of dues, will promptly receive them as they appear in our pages.

We will, on, this occasion, urge the medical profession throughout Kentucky, to sustain our State Society. The eighth annual session will be held in Lebanon, on Wednesday, 20th of April, 1859, and we hope the meeting will be largely attended.

In the confusion necessarily attendant upon the arrangement of our first issue, it may be, that many errors have escaped notice. If so, we trust that our correspondents will not feel annoyed, or fearful that such are to occur in future. We intend to revise all communications carefully, and thus relieve the writers of an onerous task. In this connection, we would urge our professional brethren to furnish us with reports of such cases as may present points of particular interest, as it is often from aggregated statistics that the most frequent phenomena of disease, and the safest therapeutics, can be educed.

As soon as our exchange list becomes complete and operative, and our foreign journals arrive, our readers may expect more miscellaneous matter than we can safely promise them for a few weeks. We have not been remiss or parsimonious in laying a good foundation for this department. We will receive in a few days, many of the leading Medical and Surgical Journals of Europe, which, with those of our own country, will always afford sufficient material of interest, to cause our selections to be sought for and appreciated.

The Semi-Monthly Medical News will be published on the 1st and 15th of every month, at three dollars per annum, in advance. Those of our professional brethren who favor the enterprise, are respectfully solicited to sustain us by increasing our subscription list. The advertising pages are under the control of Messrs. Hanna & Co., to whom advertisements may be sent, and with whom all arrangements relating to that department, must be made.

AMERICAN MEDICAL ASSOCIATION.

The twelfth annual meeting of this association will be held in Louisville, Ky., on Tuesday, May 3d, 1859. The secretaries of all societies, and other bodies entitled to representation in the association, are requested to forward to the Secretary, S. M. Bemiss, at Louisville, correct lists of their delegations so soon as they may be appointed. The convention of Teachers, invoked by a resolution of the National Association, for the purpose of a general conference upon the best means of elevating the standard of Medical Education in this country, will meet in the same city, on Monday, 2nd of May.

Medical Journals, throughout the United States, are requested to insert the above.

S. M. BEMISS, *Sec'y Am. Med. Asso.*

Reports of such proceedings of the College of Physicians and Surgeons, as may be important, will be made for this journal.

KAMALA—RED POWDER FROM THE ROTTLERIA TINCTORIA.—The Kamala is a red powder which covers the fruit of the Rottleria Tinctoria, a tree belonging to the natural order of Euphorbiacæ. It has been used for a long time in India in dying silk. Its principal interest to the medical profession is its efficacy as an anthelmintic, especially in reference to the Tænia. Dr. Mackinnon principal physician of the medical staff, in Bengal, writes: "My attention was first drawn to the Kamala by an artilleryman suffering from Tænia, upon whom turpentine and kousso had no effect. This man saying that one of his comrades had been relieved by Kamala, I immediately sent for it, and without any previous preparation of the patient, administered 3 drachms; this produced no effect, at the end of four hours, when the same dose was repeated;—there resulted frequent evacuations, and with the fourth discharge six feet of Tænia passed off. This was followed by sixty cases similarly treated, and with complete success in all but two, from which Dr. M. concludes: First, that the Kamala is an efficacious remedy in Tænia, and superior to turpentine or kousso. Second, it can be given in doses of 3 drachms. Third, for a female or one in feeble health, 1½ drachms suffice, and if necessary ½ ounce of castor oil."

Also, Dr. Anderson, surgeon to a regiment in India, and Dr. C. A. Jordon, publish more numerous cases with no less conclusive results. Dr. Anderson uses also a tincture—℞ Kamala, 6 ounces, Alcohol, 16 ounces; macerate two days and filter—dose, 1 to 4 drachms; diluted with aromatic water. This medicine is now used in England, and will doubtless become a fixed article of the materia medica.—*Journal de Pharm. et de Chim.*

CHLORATE OF SODA—Recommended by Dr. Gueneau de Mussy, physician to La Pitie Hospital, in Paris. He uses it as a substitute for Chlorate of Potash, in all those diseases for which the latter is employed. He prefers it on account of its being more soluble than the potash salt, less objectionable on account of taste, and he, moreover, thinks as a general thing, that the soda salts are more readily supported by the economy than the potash salts.—*Ibid.*

EXTRACT FROM MINUTES OF THE SOCIETY FOR THE ADVANCEMENT OF NATURAL SCIENCES, OF LOUISVILLE.

[Furnished by W. N. HAILMAN, Secretary.]

Mr. Dembitz read a paper on "Acoustics in its connection with the human voice."

He first defined sound as "certain vibrations of matter, of sufficient strength and velocity to be perceptible to the sense of hearing;" stated that any substance or body, in so far as it is elastic, may produce sound by its vibrations, and may communicate it, (nothing but a perfect vacuum interrupting it); that we must distinguish in sound three things: its *pitch*, its *strength*, and its *quality*."

Pitch was defined as the result of the frequency of the vibrations, increasing in height with the frequency of those vibrations or oscillations. He then described the various manners in which the numbers of oscillations producing a sound have been ascertained by actual experiment, stating that by one of these methods, a steel spring was forced to make twenty-four thousand oscillations in a second: producing an audible sound two octaves higher than the highest note of a seven octave piano; and that by a slight modification of this method, the steel spring produced a clear and intense sound of only eight oscillations a second. The method here alluded to, consists in revolving an indented wheel, the teeth of which lift a flat spring affixed to a strong wooden frame. This spring being raised by each tooth of the wheel, and rebounding by its own elasticity, before the succeeding tooth can work upon it, will make an oscillation for each tooth. By varying the rapidity of the wheel's motion, Savart arrived at the results mentioned above.

The strength of the sound, which can be best tested by the distance at which it is audible, depends on the amplitude and force of the oscillations. Mr. Dembitz here compared the oscillations of the air (the condensing and rarifying of the air in alternate strata) which finally bring the sound to the ear, to the oscillations of a pendulum, proving this analogy true in several points of view. Mr. D. considers the quality of sound, practically, of much greater importance than even its pitch or its intensity, because on it alone the human language depends.

He dismissed this subject after some striking illustrations, as not belonging properly to his discourse; then enumerated the various directions of the vibrations of sounding bodies; and proceeded to give an account of the nature of the human voice.

For a long time he said it was believed the windpipe produced

sounds on the principles of a wind instrument—the length of the vibrating column of air modifying the sound. But even a superficial reflection would have shown this belief to be unfounded; for the voluntary contraction of the windpipe is too inconsiderable, when compared with the compass of the human voice. It was then thought sound was produced in the mouth by the air which is blown into it through the glottis.

These theories were both proved faulty by Dr. Mueller, of Berlin (who died a few months ago), who, by experiments made on the human larynx, directly proved that the voice had its seat in the vocal chords, whose tension modified the pitch of the sound produced; the greater the tension, the higher the pitch. J. Mueller would cut a larynx from a human subject, separating from it the muscles which in the living individual, serve for its tension and relaxation, and by substituting strings with appended weights, would illustrate the influence of this tension upon the pitch of the voice." By increasing the tension from ¼ of an ounce to 18 ounces, Dr. Mueller succeeded in raising the sound produced 2½ octaves, or in other words increasing the frequency of vibrations almost sixfold.

The lower vocal chords are then the seat of the voice, and the upper vocal chords serve as a kind of sounding board, strengthening by their vibrations the sound given by the lower ligaments, whilst in the mouth the articulations and vowels are modified.

The latter part of Mr. D's. discourse was illustrated by some experiments on the larynx of an inferior animal.

Dr. Goldsmith then inquired about the construction and cost of an ozonometer.

T. E. Jenkins answered that Schoenbein's ozonometer was made by saturating filtering paper with starch, in which some iodide of potassium had been dissolved; that it indicated the presence of ozone in the open air or any other location in the following manner:

Ozone, by its oxydizing influence, combines with the potassium of the iodide, liberating the iodine, the latter coming in contact with the starch imparts to it a blue color, by the intensity of which the amount of ozone may be approximatively estimated.

The *Chemist* (November, 1858, page 119) has the following article:

Dr. Lankester exhibited an instrument for measuring the constant intensity of ozone. The instrument consisted of two small rollers, included in a box, which [rollers] were moved by means of an ordinary clock-work. Over the rollers a strip of paper prepared with iodide of potassium and starch is allowed to revolve, the paper becoming exposed to the air for an inch

of its surface in the lid of the box. Twenty-four inches of paper pass over the rollers in the course of twenty-four hours, and thus the paper registers by its color the intensity of the action of ozone in the atmosphere. Dr. Lankester pointed out the importance of ascertaining the amount of ozone in the air, on account of its undoubted relation to health.

The situation where this experiment is made must be free from currents of acid gases or vapors, because acids would, with the iodine and moisture in the instrument, form hydriodic acid, which, by light, is decomposed into its elements — hydrogen and iodine. The iodine would thus, also, be at liberty to act on the starch and impart to it the characteristic blue color.

Mr. Scheffer remarked that another inconvenience might make the instrument unreliable, especially in warm weather, when the starch will easily ferment. The acids produced by this fermentation would then act in the same manner as the currents of acid gases or vapors mentioned by Mr. Jenkins.

A member inquired what was the nature of ozone?

Mr. Jenkins answered, that it was oxygen in a nascent state, produced by electricity, evaporation of volatile oils and the slow combustion of phosphorus in air or oxygen. Ozone is a powerful oxydizing agent, producing decomposition in many organic and inorganic compounds.

Messrs. Brandeis and Scheffer remarked that ozone had been used in Munich to disinfect hospitals from cholera; but with very unsatisfactory results, perhaps on account of the malignancy of the miasm. The ozone was created by the evaporation of turpentine.

Dr. Goldsmith stated that in Guy's Hospital, London, it had been used with decided success in erysipeloid diseases; that erysipelas was now assuming an epidemic character in Kentucky; he thought it therefore advisable to institute experiments in regard to the amount of ozone in the atmosphere — a diminution of that substance being, perhaps, the cause of the prevalence of erysipelas.

Note by Professor Hailman.—I found, subsequently, in the *Journal de Chimie et de Pharmacie*, a few remarks on ozone, which I add here:

"Mr. de Babo, professor of Physics at the University of Freilburg, in Breisgan, exhibited before the meeting (the scientific congress, at Carlsruhe), an apparatus to prepare ozone. This apparatus in which ozone is obtained by the combustion of phosphorus allows us to rid the gas from the phosphorous acid by which it is generally rendered impure. We arrive at this result by washing the gas with chromic acid. This acid not only oxydizes the phosphorous acid, but it increases the ozone, for after the washing, we have more ozone than before,

evidently because the oxydation of phosphorous acid is itself a cause of ozonization.

Babo succeeded in obtaining ozone in an anhydrous state, whence it follows that this gas, or at least this particular kind of ozone, cannot be confounded with the hydrogenated ozone ($H O^3$) discovered by Mr. Beaumert.

Bunsen and *Magnus*, who spoke on this occasion, think that we must admit two kinds of ozone, the one the allo-tropical oxygen, the other a hydrogenated compound. This obscure question of the nature of ozone has made a considerable step in one of the subsequent sessions, as may be seen from the following article:

Mr. Schoenbein commenced by announcing the existence of three kinds of oxygen; the one, ordinary oxygen, that which we breathe in the air; the two other kinds of oxygen are two kinds of ozone, which behave towards each other like the two kinds of electricity. Indeed, ordinary oxygen results as soon as these two kinds of ozone are brought together; and, on the other hand, we destroy the ordinary oxygen, as soon as by a certain chemical action, we deprive it of the two allotropical modifications composing it.

This tendency on the part of the two modifications to produce ordinary oxygen, explains certain so-called *catalytical* effects; thus the peroxide of barium and oxygenated water made acid with nitric acid, are reciprocally decomposed, producing water, oxide of barium and ordinary oxygen. Under the same circumstances the permanganate of potassa is reduced to manganic oxide, the chromic acid becomes oxide of chromium; that is, these compounds are deprived of oxygen in the presence of an abundant source of oxygen, and in close contact with ozone, whose combusting power is able to oxydize even the least oxydizable bodies, such as nitrogen, which is transformed directly into nitric acid under the influence of ozone.

These so contradictory effects are explained by what we said above: a strongly oxygenated compound may be decomposed in the presence of a compound rich in oxygen, whenever one of these compounds contains oxygen, which may be called *positive*, and the other contains *negative* oxygen. The result of this decomposition is ordinary *neutral* oxygen. This also happens when ozone obtained from phosphorus is treated with oxygenated water; the product is only pure water and ordinary oxygen. In order, then, that ozone or nascent oxygen should act as an energetical oxydizing agent, it must not be in the presence of nascent oxygen from oxygenated water. As an acid loses its acid properties in contact with an alkali, and vice versa, thus also *positive* ozone loses its oxydizing properties in contact with *negative* ozone.

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OPIUM IN LARGE DOSES.

[An abstract of a Paper read before the Louisville Medical Club, by R. J. BRECKINRIDGE, M.D., Prof. Mat. Med. and Therapeutics, University of Louisville.]

[This paper was prepared at the request of the Club, but with no other purpose than to elicit the views of the members in reference to the administration, under certain circumstances, of *large* doses of opium.]

The propositions advanced are—

I. That opium has a wider therapeutic application, and a higher therapeutic value, than any other medicine.

II. That in very many cases of disease, it may be advantageously used in *much larger doses* than those commonly given.

III. That the proportion of these cases is larger, and the safety of such administration much greater, than generally imagined.

I. That opium is not only capable of fulfilling a *greater number* of indications than any other medicine, but that these indications are precisely—as to one or more of them—those, which in the majority of cases of disease, especially in its acuter forms, require oftenest to be fulfilled, is, I think, demonstrable by reason and experience.

Opium is used—*a*, as a stimulant (fevers of adynamic type, &c.)—*b*, as a *hypnotic* (morbid vigilance as in delirium tremens, fevers, &c.)—*c*, as an *anodyne* (pain of all kinds)—*d*, as an *antispasmodic* (tetanus, colic, passage of calculi)—*e*, to allay general or local irritation (restlessness, cough, strangury)—*f*, to diminish or arrest morbid discharges (diarrhœa, &c.)—*g*, as a diaphoretic—*h*, to modify or restrain the action of other medicines.

These properties are undeniable; and I am persuaded that in large doses, it has—as growing out of these, or as an addi-

tional inherent property—decided *antiphlogistic* powers: in some cases, it directly diminishes and controls inflammation.

Again, these therapeutic effects are accompanied or preceded by certain physiological phenomena, well marked and constant, except when modified by idiosyncrasy or disease. These are:

1. More or less of a general *excitement* of the nervous centres and circulatory system, which we call its *stimulant* effect.

2. Greater or less *repose* of all parts of the system, varying according to dose, disease, or idiosyncrasy, from a state of calm and gentle quietude, to one of profound coma.

3. *Depression*, ranging, according to the above named conditions, from a simple and very slight to a serious and dangerous prostration—a prominence of the extreme symptoms of the two last named effects, marking *Poisoning by Opium.* It is generally further conceded that the stimulant effect is more manifest from *small* doses—that the quieting, stupefying, or comatose effects are in a direct ratio to the increase of the dose—and that the depressing or prostrating effects bear a stricter and more constant relation to the *narcotic* than to the *stimulated* condition previously produced.

A marked stimulant effect can only be avoided by the administration of full doses, or by combination of the smaller with a depressing and relaxing agent, like ipecac or tartar emetic.

II. To illustrate this part of the subject, I take several cases at random from my notes.

Case 1—July, 1849.—A. H., aged 29. *Cholera.*—Saw him at 10, P. M. Had been taken about three hours before with nausea; violent abdominal pains, and very copious discharges from the bowels; no premonitory diarrhœa. At the time of my visit he was suffering from most distressing nausea and vomiting, severe cramps and profuse evacuations, thin, watery, whitish, and flocculent, the last two having nearly filled the vessel. Ordered mustard emetic; after its operation, Morph: Sulph: grs. 2, to be placed on the back of the tongue, the stomach being too irritable to retain any thing. After two hours, finding some, but not much abatement of the symptoms, and *no signs of incipient narcotism*, ordered Acet: Opii ℥1, (i. e. Opium ix gr.,) crushed ice internally, and as the stomach became more quiet, capsicum and carb. ammonia. In two hours more, I ventured to repeat this dose of opium, watching, of course, carefully, its effects. These doses were repeated sometimes as often as once an hour, and as the more urgent symptoms abated, at longer intervals, or in smaller quantities, till twelve o'clock next day,

during which time he had taken of the Black Drop, ʒ 1, or of Morphia, grs. 2—a total of 64 grains of Opium in 14 hours. I have neither tried or seen any treatment of epidemic cholera, which is as successful as that which looks to opium in large doses as its corner-stone.

Case 2—August, 1853.—A. L. aged 38. *Dysentery*, four days' standing. Two days before had taken a table-spoonful of castor-oil—in the fifteen hours preceding my visit, had 32 operations, small, mucous, and bloody—tormina and tenesmus constant and severe. Ordered Morphia grs. 2; hot poultice to the abdomen; five hours after Tinct: Opii ʒ1, and per anum three hours afterward Tinct: Opii ʒ2. At the end of twelve hours the violence of the disease was so far mitigated that he obtained a pretty fair sleep of several hours' duration, and under greatly reduced quantities of opium, to which sulphuric acid was added, made a speedy recovery. When I make opium the basis of my treatment in dysentery, I rarely administer to an adult male *less* than 5 grains.

Case 3—Sept., 1854.—Consultation case. *Puerperal Fever.*—Labor had lasted nineteen hours—disease became marked within twelve hours afterwards. The second day I was called in—symptoms all urgent—suggested the attempt to semi-narcotize the patient—administered Morphia grs. 2—repeated eight hours afterwards—doses diminished at intervals of ten hours to one and then ½ gr. Hop poultices meanwhile being applied as soon as their weight could be borne. Recovery.

Case 4—Dec., 1856.—W. D. *Delirium Tremens.*—(In three years previous I had attended this patient four times for the same disease.) Delirium violent. Ordered Ammonia Acetat: ʒ½; Tinct: Opii ʒ2, to be repeated in three hours if the patient were not asleep. Five hours afterward I saw him (two hours after the second dose, making 18 grs. of opium in that time), decidedly composed, with slight contraction of the pupil. Watched carefully until the pupil again dilated, and then gave brandy at intervals, and at bedtime Tinct: Opii ʒ1. Recovery speedy.

In a case in the City Hospital, which fell under my charge about the same time, of compound comminuted fracture of the leg, complicated with delirium tremens, the patient took two grains of morphia every two hours during the thirty-six hours succeeding his admission (or about 180 grs. of opium), without the slightest symptom of narcotism.

The history of the use of opium in very large doses, in the treatment of serous (especially peritoneal) inflammation, is simply a recital of the advantages, not to say necessities, of pursuing that plan.

III. What conditions justify or demand this free use of opium, and what caution is necessary in such administration? I say nothing now of those circumstances which modify the effects of medicines in general, or of opium in particular—nothing of *age*, or *sex*, or *temperament*, or *idiosyncrasy*, or *mental conditions*, or *modes of life*, or *habit*—though if opium be a less safe medicine than I imagine it to be, it is a curious fact that there is no other drug so potent, to the use of which the system becomes so speedily and so easily accustomed. I note very briefly those *morbid conditions only* which seem to me make proper, in some cases, this kind of medication. They are chiefly—

1. *Excessive Pain.*—One of the most reliable, as it is one of the most gracious, effects of opium, is, relief of pain. Pain is one of the most frequent of all expressions of diseases—one of the most urgent in its calls for relief; and when severe, exhausting in its effects, nothing more largely diminishes the susceptibility of the system to opium, unless it be—

2. *Morbid Vigilance*—especially of that kind which is probably connected with more or less exhausted excitability, as found in delirium tremens, and some other forms of disease.

3. *Excessive Evacuations*, with more or less pain, and involuntary muscular movement, as found, for example, in cholera; or very frequent, painful and spasmodic movements, as in dysentery.

4. In the various forms of excessive muscular action—temporary or permanent spasm—of a greater or smaller portion of the muscular system, as in tetanus, in cramps, in the passage of biliary or renal calculi, &c.

5. *Peritoneal inflammation—phlegmonous, puerperal, perforating.*

Further, I assert, that a careful observer, watching his case, need not apprehend danger from a *repetition* of any of these doses. The most of the diseases requiring this administration of opium, require, also, such minute and frequent observation, as must detect speedily and certainly the occurrence of any ill consequences. I venture, therefore, to affirm—

1. As a principle of rational practice, that the physician, having a sufficiently clear conception of what remedies should be used, ought to proportion them (with reference to their proposed action) to the intensity and rapidity of the disease; and, that he should continue in the same, or increased quantities, the

use of the medicine, until he sees, either, that what he desires, has been, or is being accomplished, or that their further continuance will not be likely to accomplish it, or that their continuation on some account, will not be prudent or safe.

2. That so far as opium is concerned, it is the *immediate* danger to life only that is to be apprehended.

3. That the effects of this medicine begin to culminate *within three hours* at farthest; and that, therefore, if any dose has been given, and no notable signs of its action have shown themselves in either the abatement of the symptoms or the contraction of the pupil, or any other evidence of incipient narcotism, the dose, small or large, may be repeated with perfect safety; so that, if opium be given to allay pain, for example, or control morbid vigilance, the dose ought to be proportioned to the obduracy of the one or the intensity of the other, and however large it may have been at first, may be duplicated indefinitely within the limits above named.

It is, I trust, needless for me to say, that I am no member of the "heroic school" of medicine. I know of no greater reform occurring in practical medicine, within the last few years, than the growing tendency in the profession to frown on excessive medication; but, I believe, at the same time, that in medicine, as in other pursuits, it is prudent to adapt, as far as possible, the means to the end.

Finally, it may be proper to say that these views are not presented as *new;* they are *practical conclusions* from the experience and observation of over ten years' practice of medicine, the last six of which include the care of a public hospital, admitting between three and four hundred patients annually.

INFRINGEMEMTS ON U. S. PHARMACOPŒIA.

By T. E. JENKINS.

In this age and country, when charlatans and pretenders are insidiously endeavoring to undermine the very strongholds of the medical profession, it behooves us to use a word or two of advice and caution. We know that it is best to disregard all such things as newspaper advertisements, for the simple reason that "*notice*" is all that is aimed at by those who understand human nature, so well, that they are aware so soon as the

masses read their fair promises, their own fortunes are made. But it is an evil nearer home to which we desire to point the medical profession.

To a very great extent, physicians are dependent upon manufacturing chemists and pharmaceutists for chemicals and preparations, and if the manufacturers be well qualified for their business, careful in the practice of it, and honest in carrying it out, the practitioner will doubtless be served with reliable (pharmacopœal) remedies with which to combat disease; but should the manufacturer be deficient in any of the previously named particulars, a physician may occasionally administer to his patient medicines which will not only do no good, but which, by their inefficiency, allow the disease to progress, even to a fatal termination, ere the real trouble be discovered. Through fault, carelessness, or dishonesty on the part of a manufacturer or dealer, his preparations may contain some ingredient which will act directly upon the patient in an injurious or detrimental manner. We doubt not that many a fatal termination has resulted from such a cause, and would instance chloroform, hydrocyanic acid, calomel, &c., as substances which have been known to be so imperfectly prepared as to act in a most pernicious manner. Likewise it may be seen how easily our prognosis may fail, should it be subjected to the proof of remedies hitherto deemed reliable, but finally found out to be either entirely inefficient or anomalous in their actions.

This great evil will be remedied when the profession exercise more scrutiny in the purchase of their medicines, and rely less upon the bland assurances of druggists.

The physicians of the country need but look at the prices-current of the various drug markets, when they will see that many powdered drugs may be bought for less money, actually, than a prime article of the crude drug may in the same quarter.

The worst and probably the most insidious of all the species of charlatanry with which we are surrounded, is, perhaps, that certain parties (who have managed to get the confidence of a large portion of the medical profession, and who, doubtless, are indebted to it, to a great extent, for the wealth which they now enjoy) are attempting to make inroads into the National Pharmacopœia, our great guide in materia medica and therapeutics, and introduce such modifications as they fancy

may be more beneficial, perhaps, in the treatment of disease, and in all probability with a pretty certain knowledge that at any rate it will tend to increase their own purses. To exemplify our meaning, we would instance a late suggestion made by a manufacturing company, who have been issuing, for some time past, an advertising sheet, under the title of Journal of Materia Medica, in which, among many others of a like kind, is an improved formula for making the compound cathartic pill—U. S. P—the improvement consisting in substituting for one of the most valuable and best known medicines of the materia medica, one of little note, and in many cases of doubtful efficacy. Another example from a number of its kind, taken from the same source, is a process for making infusion of wild cherry bark, by using an extract of wild cherry bark (!) (doubtless the result of their own skill) mixed in certain proportions with water. Upon the whole, we are reminded, on perusing their circular, of the idea of "medicine made easy;" and in regard to the substitution already mentioned, and the insinuating manner in which many "eclectic remedies" are associated or compounded in the preparations of the Pharmacopœia, we are at once referred mentally to the fable of the war between the birds and beasts, in which the bat plays so ambiguous a part. The moral of that fable is all that we call the attention of our readers to.

The profession may not be aware that some manufacturers of medical preparations offer, and advertise for sale, *various qualities* of chemicals. Nevertheless, they should know that parties make and sell to druggists sweet spirits of nitre of from three to five different strengths, not even the strongest of which comes up to the standard laid down by the pharmacopœia. (See U. S. Dispensatory, 11th ed. page 883 et seq). The same can be said of lunar caustic. (See U. S. D., 11th ed. page 949). Hoffman's anodyne. (See U. S. D. 11th ed. page 877). Compound extract colocynth can be bought from almost all sources for less per pound than the scammony alone, which enters the officinal extract colocynth compound will cost! (See U. S. D., 11th ed. page 1028, and Am. Jour. Pharm. for March, 1857, vol. xxix. 97).

Why is it that sweet spirits of nitre is made of more than one uniform (pharmacopœal) strength? Why do manufacturing

chemists supply a No. 1 and No. 2 lunar caustic, as well as the "lunar caustic pure?" Why can druggists buy Hoffman's anodyne, and sell it to doctors at 25 cents per pound, when it can not be made in the largest way of proper strength and quality, for less than 40 cents per pound? Why is a second quality of mercurial ointment made? Why are *many* of the compounds of the Pharmacopœia sold for less, after the mixture is made, than the sum of the costs of the separate ingredients (in the largest wholesale way) would amount to? Is it because the profession calls for such depreciated remedies, or is it because of the cupidity of manufacturers and dealers? Why is it that many therapeutic agents, once so highly esteemed by the fathers in medicine, have of late years fallen into neglect and disuse? Is it because they have a different action now from what they had a century ago, or is it because we are using, as medicines, things which have only the name, and none of the substance of those which were so successfully employed by our illustrious teachers? May not the modern pruriency for new remedies be, to some extent, accounted for, on the supposition that the old ones do not come up to their description as laid down in our text books?

The great moment of this subject impels us earnestly to call the serious attention of the faculty to this important matter, for we think that the remedy for the evil is in the hands of the profession, and all that is required of us is that we compel our druggists to supply none other than such preparations as shall satisfy our testing, and prove themselves to be fully up to the standard of the national Pharmacopœia.

May not the great success which quack medicines meet in the community, be explained on the supposition, that, as regular medicine is frequently inefficient, oftentimes on account of bad remedies, people are led to doubt the skill of physicians, and go off directly to quackery for that relief which the profession has failed to give them. Human nature is such that, when the doctors fail, it takes up that which promises most, and around which there is most mystery. Quackery is the inevitable vortex into which myriads of people are drawn, simply from the fact that the means in the hands of the faculty are so often inadequate to keep them away from the remotest current of the whirlpool.

EXTRACT FROM MINUTES OF THE SOCIETY FOR THE ADVANCEMENT OF NATURAL SCIENCES, OF LOUISVILLE.

[Furnished by W. N. HAILMAN, Secretary.]

THIRD REGULAR MEETING, Dec. 20, 1858.

Mr. W. N. Hailman read some suggestions on table-salt, as a nutritive agent. He first showed that it was a necessary nutriment.

1. The blood contains 0.4—0.6 per cent of table-salt always in all healthy persons; "8 per ct. of the solid constituents of cartilage are chloride of sodium" [Mueller;] it is a necessary part of the gastric juice, etc. "In the aggregate, we find that a man weighing 150 pounds, has one pound of table-salt in his body" [Meyn.] The above facts prove positively, that it is a plastic food. (That table-salt is a plastic and not a respiratory food, is also proved by the fact that the results of respiration are carbonic acid and water—not a trace of either chlorine or sodium.)

2. That table-salt is a necessary nutriment might be inferred from the fact, that we find it in eggs and in milk. It is improbable that nature would offer an unnecessary food to the nascent organism.

3. We have an instinctive desire for this mineral, especially after being deprived of it for any length of time. "Among nations where salt is a luxury, as in the interior of Madagascar, table-salt is a current money, parents surrender their children, brothers their sisters, husbands their wives, to slavery and ignominy for a few handsful of salt" [Mueller.]

4. The wild plantivorous animals (for carnivorous animals find salt enough in the blood of their prey,) seek with eagerness the brine-springs and salt-licks.

To show the importance of salt to the cattle breeder, I subjoin here an extract from the popular work of Dr. L. Meyn:

"The effect of proper salt-feeding, in horned cattle, shows itself by increased secretion of milk, better meat, and more vigorous health. Sheep pay the judicious proprietor with better and heavier wool. Spanish sheep are said to owe their fine wool to the abundant salt in the valleys, at the foot of the Pyrenees. In regard to the increase of meat in sheep, it has been shown that one pound of salt produces a gain of from 4—10 pounds of flesh a month, the rest of the food being the same; and as we can give $\frac{1}{2}$ pound of salt to one sheep in a month, a flock of 200 sheep would give for 100 pounds of salt an increase of 400—1000 pounds of meat. Besides experience has shown, that on the same pasture 50—100 per cent. of the

sheep fed without salt died, whilst in flocks fed with salt, 1 per cent. at most, was lost.

"The horse, also, is very grateful for salt: greater boldness and rapidity in its motions, finer, smaller hair, and more rapid growth."

Mr. H. then mentioned the use made of salt to preserve certain kinds of food, especially meat and fish. This property depends principally on its power to dissolve the most easily decomposed substance of the meat kind; albumen, unfortunately, also, the most nourishing. But this is the strange circumstance. The Holland herring is salted only with the salt of St. Ubes, in Portugal; and this circumstance alone is thought to make it so preferable to the Swedish, Northern and Russian herring, in the preparation of which the St. Ubes salt is mixed with salt from the Mediterranean. England, in spite of its abundant treasures of salt, sends yearly for large quantities of salt of St. Ubes, to provide its marine with delicate and good salt meat and fish.

For this, especially, Mr. H. wished an explanation; also, for the strange and unexplained fact, that the salt from brine springs alone seems fit to preserve butter. No discussion ensued at this meeting about the subject of table-salt.

FOURTH REGULAR MEETING, Jan. 3, 1859.

Mr. O. A. Drane read his regular paper on "Tobacco."

He first gave a description, then a short historical sketch, and then the derivation of the names of the plant.

He dwelt upon the effects of the use of tobacco on the nervous system, and concluded with an article of Dr. Laycock on the effect of tobacco on the alimentary organs.

Mr. Hailman said that one of the morbid symptoms consequent upon the use of tobacco, was that coughing was produced, perhaps, rather by the dryness of the throat, resulting from the excessive throwing out of saliva; that it might be prevented by avoiding this. This fact was corroborated by Mr. J. W. Seaton, who perceived the same cough after the chewing of tolu.

On motion of L. N. Dembitz, further discussion was suspended, because one of the members was making experiments on the chemical composition of tobacco, the result of which might make the discussion more fruitful.

Thos. E. Jenkins (in the chair) asked if any remarks were to be made on the nutritive power of table-salt. He added that, admitting its necessity for the animal organism, it was, perhaps, contained in sufficient quantities in the food of the animals, and that, consequently, it would be unnecessary to use it in its pure form as table-salt.

L. N. Dembitz then said that there were savages who were not acquainted with the table-salt, and who, nevertheless lived.

W. N. Hailman said that, admitting the presence of table-salt in vegetable food, it was probably not contained in sufficient quantities therein, corroborating this assertion by the fact that plantivorous animals seek with eagerness salt-licks, and brine, and springs, to make up for the deficiency of chloride of sodium in their food; and that cattle do not thrive without the use of mineral table-salt. Carnivorous animals find salt enough in the blood of their prey, as also the savages, mentioned by Mr. Dembitz, who drink greedily the blood of their victims.

Mr. Jenkins inferred, from the fact that chloride of sodium was contained in the blood in the proportion of 0.4 to 0.6 per cent., that it was a necessary constituent of that humor in which it acted as a solvent for albuminous substances.

Dr. Wible spoke of the necessity of chloride of sodium to furnish the chlorine which enters the composition of the gastric juice in the form of hydrochloric acid, besides he considers it as a stimulant of the salivary and gastric glands and of the kidneys.

Mr. Dembitz pointed out the necessity of chloride of sodium to furnish the sodium, entering the composition of the bile.

Dr. Wible saw in this a proof of his remark: the chloride of sodium leaves its chlorine in the stomach and its sodium in the bile.

Mr. Jenkins stated that experiments had been made, which seemed to prove that the amount of hydrochloric acid in the gastric juice was equivalent to the soda in the bile, pancreatic and intestinal juices and saliva.

On motion of Mr. Hailman, a committee was formed to report to the society whether any proofs existed of the fact that the hydrochloric acid, in the gastric juice, had its equivalent of soda in the bile; and whether their increase and decrease corresponded, and, also, if those proofs were not found to institute experiments with a view to ascertain this subject.

E. Scheffer, Dr. Wible, and Thos. E. Jenkins, were appointed to that committee.

An epidemic anginose affection has been singularly fatal in Albany of late, which from the descriptions we have seen, resembles what was formerly known as putrid sore throat, and differing but little from scarlatina maligna. Nothing satisfactory on the subject has yet appeared in the journals. We hear that Dr. Brinsmade, of Troy, President of our State Medical Society, is investigating it.—*American Medical Gazette.*

Selected Articles.

FÆCES.

Fæces consists partly of undigested, partly of indigestible substances; their odor depends on volatile fatty acids: butyric acid, and capric acid also called fæcin. Sulphuric acid is employed as a test for fæces in cases of strangulated hernia, &c., after having first mixed them with water; the fatty acids are thus volatilized, and are then recognized by their smell. Sulphuretted and phosphuretted hydrogen are formed in the intestinal canal, and are partially absorbed by the fæces. The color of normal fæces is yellowish brown, from caprophæin, which is a product of biliphæin. Biliphæin does not occur as such in them. Caprophæin immediately strikes a red color with nitric acid. If the flow of bile into the intestinal tube be obstructed, the fæces assume a pale color. Soluble salts are found only in very small quantity in the fæces; under the microscope, we observe portions of vegetable matter (spiral vessels), and from these the ashes of incinerated fæces derive their potash. The earthy phosphates are found in great quantity; in rachitis they are so abundant, that the ashes occupy almost as much space as the fæces did before incineration. Of iron there is scarcely a trace; the ashes are white.

The consistence of abnormal fæces may be natural, increased, or diminished.

1. In fæces of natural consistence we do not find much that is abnormal. In affections of the bones, and especially in rachitis, the earthy phosphates are present, as has been observed, in excessive quantity. After the use of ferruginous remedies (which, however, usually produce a thinner, porridge-like consistence), and after hemorrhoidal bleeding, we observe a darker, blackish-green color, derived from sulphuret of iron. The ashes then have a rusty brown color, while the ashes of vegetable coloring matters are white. Analysis does not show whether the iron is derived from the chalybeate preparations which have been taken, or from blood. In thin fæces albumen may be sought for.

2. *Increased consistence* is observed after the ingestion of carbonate of lime (in spring-water, or as chalk, &c.) in abstinence from drink, in chlorotic patients, &c.

3. *Diminished consistence.*—Before examination, the portions which are not quite fluid should be dissolved or suspended in water. We may distinguish,

(*a*) Watery Discharges.—These contain soluble salts, which do not ordinarily occur in the fæces, and usually some biliphæin; their reaction is sometimes neutral, sometimes acid; in children this is owing to the presence of lactic acid.

(*b*) Serous Discharges.—The fluid floating above the solid portions contains albumen, although the solid parts do not contain blood (in which case these portions would be of a greenish or brownish-black color.) They have an alkaline reaction derived from carbonate of soda, sometimes also from ammonia, as in typhus, and are generally poor in caprophæin. They occur in chronic diarrhœa, dysentery, typhus, and cholera.

(*c*) Bloody Discharges.—They are either of a bright red color, from the lowest part of the intestinal canal, and exhibit blood-corpuscles under the microscope; or are darker colored in proportion as the effusion has taken place higher up in the tube; if they are derived from the stomach, they are black as pitch. Iron may be demonstrated in the ashes and albumen in the fluid portions.

(*b*) Bilious Discharges are sometimes pap-like, sometimes watery, sometimes serous; they usually contain biliphæin instead of caprophæin. It is detected by means of Heller's test. Great importance is often ascribed to them, as they are supposed to be connected with an affection of the liver. When diarrhœa sets in rapidly, the first motions almost always contain biliphæin; this is, therefore, formed after the exhibition of purgatives, in the commencement of cholera, &c. Where biliphæin is long persistent (cholorrhœa) we may infer the existence of an affection of the liver. In dysentery the excretion of bile seems somewhat increased.

The green stools which occur during the use of mineral waters often proceed from sulphuret of iron. After calomel, they proceed from sulphuret of mercury; but we should remember in both cases that biliphæin passes off in the beginning, as during the administration of other purgatives.

(*e*) and (*f*) Mucous and Purulent Discharges are not easily distinguised. The microscope exhibits no diagnostic characters. In purulent stools the fæcal serum contains albumen. Mucus is found in the mass, as transparent lumps capable of being drawn out into threads; it is also often voided in this form without any fæcal mass. Pus is more equably intermixed; where ammonia is not present, and has not already affected the pus, the ordinary test for that secretion may be applied to these fæcal masses.

All diarrhœal discharges may become *ammoniacal;* it is a bad

sign: we find a strongly alkaline reaction, and with it invariably crystals of ammoniaco-magnesian phosphate. This condition frequently attends purulent diarrhœa in typhus and puerperal fever. In dysentery the fæces may become ammoniacal without giving rise to an unfavorable prognosis, as the development of ammonia proceeds from the decomposition of intermingled urea derived from the blood and serum.

Biliary Calculi are in general distinguished from conglomerarted fæces by floating in water. They may consist of,

1. *Cholesterine*, which occurs in masses of all possible sizes, sometimes exceeding that of a pigeon's egg; such calculi are ordinarily white, or slightly colored with biliphæin. Ignited on platina foil, they first melt, and then burn with a yellow flame, forming much soot, and developing a smell of burning fat. They dissolve in boiling alcohol, from which the cholesterine precipitates on cooling in the form of white scales. It is by this process cholesterine is usually obtained.

2. *Cholesterine and Biliphœin.*—This is the most usual form of biliary calculi; they are of a brownish-yellow or dark orange color, and participate in the characters of Nos. 1 and 3.

3. *Biliphœin.*—These calculi are blackish-brown, do not fuse on platina foil, but burn with a faintly yellow flame. Extracted with solution of potash they give a dark orange-yellow solution, to which Heller's test is to be applied.

4. *Inspissated Bile.*—These are very common in the old; are usually small, black or green, very hard, and do not fuse when heated on platina foil. They are to be extracted with solution of potash, to which Heller's test for biliphæin and Pettinkofer's test for bilin are to be subsequently applied.

5. *Carbon.*—(Demonstrated by Berzelius); these are rare, do not fuse, and are insoluble in all re-agents.—*Heller, by Dahl.*

MATTERS DISCHARGED BY VOMITING.

According to the chemical nature of their contents we may distinguish the following varieties:—

1. *Normal Contents of the Stomach.*—These, in addition to the ingesta, consist of a mucous, transparent fluid, having a strongly acid re-action, which is a mixture of mucus and gastric juice. In the latter we find all the salts of the blood and a peculiar acid, the acid of the stomach. This possesses the energy formerly attributed to pepsin; pepsin is only a product of decomposition, developed by the action of dilute hydrochloric acid on mucus. The acid of the stomach is soluble in alcohol and in

water; if we evaporate the alcohol, a viscid mass of syrupy consistence remains behind. Free hydrochloric acid is not found in the stomach, except when the chloride of sodium of the gastric juice is decomposed by acids. Lactic acid and fatty acid are derived solely from the food.

2. *Watery vomitus* is the normal contents of the stomach plus water, has an acid re-action, contains no albumen, and must be carefully distinguished from the following:—

3. *Serous vomitus.*—In this the gastric juice has nearly disappeared; it has an alkaline reaction, and may be almost considered as a very watery serum of the blood; it contains small quantities of albumen, alkaline carbonate, and albuminate of soda. It occurs in cases of very frequently repeated vomiting, where the effort gives rise to hyperemia and exosmosis: consequently in pregnant women, almost constantly in perforating ulcer, which has not yet produced hemorrhage, in carcinoma, &c., and in cholera.

4. *Uremic vomitus* occurs in connection with other uremic phenomena. It has an alkaline reaction in consequence of the presence of carbonate of ammonia, which is detected as in albuminous urine; it contains in addition albumen, urea, and sometimes uric acid and uroxanthin.

5. *Bilious vomitus.*—Chiefly in hyperemia of the liver, especially when metallic poisons become deposited in that organ, which takes place very rapidly, as in poisoning by copper and arsenic. Biliphæin is usually present in the green or blue, rarely in the yellow, modification; in posioning with copper, the color is derived from it. Bile is also frequently found mixed with the varieties of vomitus. Biliphæin is demonstrated by means of Heller's test; bilin is decomposed so rapidly in the stomach, that it can be rarely detected.

6. *Bloody vomitus.*—We may find a fresh red color, or it may have already become of a blackish brown; in the first case, we shall be able to discover blood corpuscles; in the second, these will not be apparent; in both cases, we shall have albumen. To distinguish the colored substance from berries which may have been eaten, we may burn it on a piece of platina foil; fruits give a white ash, blood a rusty brown. The ash may be dissolved in hydrochloric acid, neutralized with ammonia, and tested for iron.

7. *Fæcal vomitus* is characterized by a yellow color and fæcal smell, the latter being increased on the addition of concentrated sulphuric acid.

8. *Purulent vomitus* is distinguished by means of the potash test, and by testing for albumen.—*Ibid.*

THE FOUNDLING HOSPITALS OF RUSSIA.

One of Bayard Taylor's letters from Europe to the New York Tribune, contains a note-worthy exposition of the extent and character of foundling hospitals of Russia, where they appear to be conducted on a vast scale.

The hospital at Moscow is an immense quadrangular building or collection of buildings, whose white front towers high over all the neighboring parts of the city, and quite eclipses in its imposing appearance every palace, church, military barrack, or other public building whatever. It can not be less than a thousand feet in length, and at a rough estimate is three times as large as the Capitol at Washington. The governorship of the institution is always conferred upon a nobleman of high rank and attainments. The annual expenditure of the hospital amounts to the enormous sum of five millions of dollars. A portion of the Government revenue is set aside for its use, in addition to which successive emperors and wealthy persons have richly endowed it. The entire property devoted to the foundling system of Russia is said to reach $500,000,000.

The institution at Moscow was founded by Catharine II. in 1762. Eight years afterwards she established a branch at St. Petersburgh, which has outgrown the parent concern, and is conducted on a still more magnificent scale. In the summer all the children are sent into the country. There is a village near Moscow whose inhabitants devote themselves entirely to the work of bringing up these foundlings. The institution last summer had under its care twelve hundred orphan children of officers, who enjoyed some privileges over the foundlings and poorer orphans. The boys are taught some practical science or profession, and not unfrequently receive places as officers in the army. The girls receive an excellent education, including music and the modern languages, and become teachers or governesses. Signs of decided talent in the children are noted and developed in the proper direction, by means of which many poor children have risen to wealth and distinction.

The apartments of the hospital are remarkably clean and neat. Each infant has a separate nurse, and in every hall there is an overseeress. The number of children confided to its care in 1857 was 14,000, and the entire number received since the foundation of the institution is 330,000, to which may be added 60,000 more born in the lying-in hospital during the same period. Including those taken at the St. Petersburgh branch, the number of children received by the Government yearly is 30,000. A very large portion of them are the offspring of poor married people in all parts of the country. The children may afterwards be reclaimed by the parents, on certain condi-

tions. The child is taken without question, and therefore no reliable statistics of the public morality can be obtained from this source. The office is open night and day, and no living child is refused. The only question asked is whether it has been baptized; if it has not, the ceremony is immediately performed. Its name and number are then entered in the official book, a card containing them and the date of its arrival is attached to its neck, and another given to its mother, so that it may afterwards be identified and reclaimed. Very frequently the mother is allowed to become its nurse, in which case she receives pay like the other nurses. After six weeks or two months in the institution it is sent into the country, where it remains until old enough to receive instruction. The regular nurses are paid about $50 a year, in addition to their board and lodging. If the parents pay a sum equal to $25 on the deposition of the infant, they are entitled to have it brought up exclusively within the walls of the institution, where it is more carefully attended to than elsewhere. The payment of $200 procures for it, if a boy, the rank of an officer. The parents are allowed to see their children at stated times, but the greater number do not avail themselves of this privilege.

Connected with the Moscow institution is a beautiful church. The buildings are carefully and substantially constructed, with admirable arrangements for heating and ventilation.

The St. Petersburgh establishment covers twenty-eight acres of ground, and employs over five hundred teachers, many of them at high salaries, and upwards of five thousand nurses, servants, and similar employees. The boys and girls, both here and at Moscow, are taught separately. The cost of their education is more than $1,000,000 annually. Besides the soldiers, common mechanics, and factory girls, which the children of merely ordinary capacity become, the government has, of late years, established many of them as farmers and colonists on the uncultivated crown lands.

ON HAUTLE, OR ANIMAL BREAD OF THE MEXICANS.

By M. GUERIN-MENEVILLE.

In the *Bulletin de la Societe Imperiale Zoologique d' Acclimation*, M. Guerin-Meneville has published a very interesting paper on a sort of bread which the Mexicans call Hautle, and which is made of the eggs of three species of hemipterous insects belonging to the group of water-bugs.

According to M. Craveri, by whom some of the Mexican bread, and of the insects yielding it, were brought to Europe,

these insects and their eggs are very common in the fresh waters of the lagunes of Mexico. The natives cultivate in the lagune of Chalco, a sort of *carex* called *toule*, on which the insects readily deposit their eggs. Numerous bundles of these plants are made, which are taken to a lagune, the *Tescuco*, where they float in great numbers on the water. The insects soon come and deposit their eggs on the plants, and in about a month the bundles are removed from the water, dried, and then beaten over a large cloth to separate the myriads of eggs with which the insects had covered them. These eggs are then cleaned and sifted, put in sacks like flour, and sold to the people for making a sort of cake or biscuit, called *hautle*, which forms a tolerably good food, but has a fleshy taste, and is slightly acid. The bundles of carex are replaced in the lake and afford a fresh supply of eggs, which process may be repeated for an indefinite number of times.

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Moreover, says M. Cravery, the Mexicans collect quantities of these insects from the surface of the water by means of hooped nets, and these are dried and sold as food for birds. In Mexico, these dried insects are sold in the streets and markets, the dealers crying "*Moschitas, Moschitos*," just as in Europe they cry "*Food for your singing birds.*"

It appears that these insects have been used from an early period, for Thomas Gage, a religionist, who sailed to Mexico in 1625, says, in speaking of articles sold in the markets, that they had cakes made of a sort of scum collected from the lakes of Mexico, and that this was also sold in other towns.

Brantz Mayer, in his work on Mexico (*Mexico as it Was, and as it Is*, 1844), says, "On the lake of Tescuco, I saw men occupied in collecting the eggs of flies from the surface of plants and cloths arranged in long rows as places of resort for the insects. These eggs, called *Agayacath*, formed a favorite food of the Indians long before the conquest, and when made into cakes resemble the roe of fish, having a similar taste and appearance. After the use of frogs in France, and birds' nests in China, I think these eggs may be considered a delicacy, and I found that they were not rejected from the tables of the fashionable inhabitants of the capital.

The more recent observation of Messrs. Saussure, Salle, Valet D'Aoust, &c., have confirmed the facts already stated, at least in the most essential particulars.

The insects which principally produce this animal farina of Mexico, are two species of the genus *Corixa* of Geoffroy, hemipterous insects of the family of water-bugs. One of these species has been described by M. Guerin-Meneville as new, and has been named by him *Carixa fermorata*. The other, identified in 1831 by Thomas Says, as one of those sold in the market at Mexico, bears the name of *Corixa mercenaria*.

The eggs of these two species are attached in innumerable quantities to the triangular leaves of the carex forming the bundles which are deposited in the water. They are of an oval form, with a protuberance at one end and a pedicle at the other extremity, by means of which they are fixed to a small round disc, which the mother cements to the leaf.

Among these eggs, which are grouped closely together, and sometimes fixed one over another, there are found others, which are larger, of a long and cylindrical form, and which are fixed to the same leaves. These belong to another larger insect, a species of *Notonecta*, which M. Guerin-Meneville has named *Notonecta unifasciata.—London Pharm. Jour., Sept.*, 1858, *from Journal de Pharmacie.*

ON THE AMOUNTS OF SULPHURETTED HYDROGEN AND HYDROCYANIC ACID IN TOBACCO SMOKE.

By A. VOGEL, Jun., and C. REISCHAUER.

If tobacco smoke be passed through an alcoholic solution of neutral or basic acetate of lead, the incurrent tube soon becomes blackened in a remarkable manner, whilst in the fluid itself a precipitate of carbonate of lead rendered brown by sulphuret of lead is deposited. To obtain the sulphuret of lead uncontaminated with carbonate of lead in the following quantitative investigations, the tobacco smoke was passed through an alcoholic solution of acetate of lead strongly acidified with acid. The precipitate of sulphuret of lead was dried and weighed, after washing with alcohol.

1. Turkish tobacco, 3-4 grms. gave 7 milligrms. of sulphuret of lead.
2. " " 3-7 " " 7-5 " " "
3. German cigars, 3 " " 9 " " "

Hence the presence of sulphuretted hydrogen in tobacco smoke is unmistakably proved. The presence of sulphuretted hydrogen in tobacco smoke may, however, be proved in a still more simple manner, by blowing the smoke through the cigar upon a piece of paper moistened with acetate of lead, when a brown color is immediately produced on the spot touched by the smoke.

The well-known reaction of sulphuretted hydrogen upon nitro-prusside of sodium is exhibited most characteristically when a few drops of a solution of that salt mixed with ammonia are put into a test-tube and the tobacco smoke is introduced by a tube, which does not reach quite to the bottom of the test-tube. The walls of the glass moistened with the solution of nitro-prusside of sodium, by shaking acquire a deep violet-red color by the action of the sulphuretted hydro-

gen of the tobacco smoke. The above data show at the same time what influence the incineration of the parts of plants must have upon the accuracy of the determination of the sulphuric acid in the ashes.

In order to determine directly the loss of sulphuric acid in the ashes caused by the incineration, the amount of sulphuric acid in the tobacco ashes produced in experiment 1 was ascertained. From this it appeared that of 100 parts of sulphuric acid in the tobacco, 12.63 were evolved in the smoke in the form of sulphuretted hydrogen. This circumstance is consequently of importance in the determination of the sulphuric acid in incinerated parts of plants, and the more as a portion of the sulphuretted hydrogen also escapes observation in the upper part of the smoke of the burning tobacco.

After cyanogen compounds had been sought in vain, even in large quantities of the ashes of tobacco, the tobacco smoke itself was examined for cyanogen. The method of detecting hydrocyanic acid in the smoke is as follows:—Tobacco smoke is passed through a concentrated solution of caustic potash. The solution by this means acquires a slight brownish color, and when a turbidity is produced by dilution with water, it must be filtered. The solution is then mixed with protopersulphate of iron and heated. It is necessary to employ a spacious vessel for this purpose, as a strong evolution of carbonic acid takes place, especially at the boiling-point. The precipitate obtained is treated with an excess of chemically pure muriatic acid, when the precipitated oxide of iron is dissolved, leaving behind it Prussian blue.

The separation of the Prussian blue is facilitated by heating the solution; after filtration and complete washing with hot water, and afterwards with alcohol, it usually remains upon the filter of a dark blue color. If, however, it be of a dingy green color from the presence of empyreumatic constituents of the tobacco smoke, it must be freed from this impurity by agitation with ether and alcohol, when it always remains with its characteristic color.

It is obtained most beautiful, when, after it has been washed as much as possible upon the filter, it is decomposed by solution of potash, and a protopersalt of iron is added to the solution filtered from the peroxide of iron, by which it is regenerated, freed from foreign intermixtures, after treatment with muriatic acid.

Two cigars, weighing together 10.6 grms., furnished 0.018 of Prussian blue; and two cigars of another kind, weighing together 8.5 grms., gave 0.010 of Prussian blue.

Amongst all the samples of tobacco investigated in the above manner by the authors, there was only one which gave

an imponderable trace of Prussian blue from 5 grms. This was a very old tobacco. All the rest distinctly showed the presence of Prussian blue. The mode of smoking tobacco, whether in the form of a cigar or in a pipe, in fact, the mode of combustion in general, appears to have an influence upon the formation of hydrocyanic acid in the smoke.—*Chem. Gaz., Oct.*, 1858, *from Dingler's Polyt. Journal.*

Temperature of the Interior of the Earth.—The increased subterranean temperature of the earth, and the variation of this amount of temperature in different places, are two facts pretty well determined by recent scientific investigation. If, then, it be admitted that the temperature continues to increase from the surface to the centre of the earth at the rate of one degree for forty-six feet, it follows that at the centre there is a temperature equal to four hundred and fifty thousand degrees of Fahrenheit's scale, and at the depth of about sixty miles there is a temperature sufficient to fuse all known rocks. These deductions are believed by some philosophers, while others are unwilling to admit them; for, though they may allow that subterranean temperature increases proportionally with the depths to which examination has extended, they assign different limits to this increase. If, however, it be true that the interior temperature increases proportionally with the depth in all those places in which experiments have been made, it will be difficult to assign any depth at which the temperature ceases to increase. It is this, in all probability, that has led M. Cordier and others to believe that the temperature continues to increase even to the centre of the earth, though at every depth it is gradually becoming less, from the radiation at the surface.

Iodide of Potassa—An Antigalactic: By Professor Rousset. (Journal de Bord. May, 1858).—The enlargement of the galactophorous tubes, so often occurring during early lactation, frequently induces fever, inflammation and abscesses of the mammæ, which indicate therapeutical treatment, for the purpose of diminishing the lacteal secretion. As the remedies usually resorted to seldom accomplish the desired effect speedily, Professor Rousset gave iodide potassium with favorable effects, in all instances hitherto experimented on. He observed the secretion of the milk to decrease considerably, more especially if the child was not put to the breast. The milk returns if the remedy has not been used for more than two or three days. The effect is more decided if not more than 40 or 50 centrigrammes are given daily. The lacteal secretion can be entirely suppressed if the remedy is administered one or two days after delivery.—*Medical and Surgical Reporter.*

Death from want of Sleep.—The question, how long a person can exist without sleep, is one oftener asked than answered, and the difficulties of answering the question by experiment would seem to leave it forever unsolved. A communication to a British society has, so far as it relates to one instance, seemed to answer the inquiry, in a description of a cruel mode of punishment peculiar to the Chinese. A Chinese merchant had been convicted of murdering his wife, and was sentenced to die by being deprived of sleep. This painful mode of death was carried into execution under the following circumstances:—The condemned was placed in prison under the care of three of the police guard, who relieved each other every alternate hour, and who prevented the prisoner from falling asleep, night or day. He thus lived for nineteen days without enjoying any sleep. At the commencement of the eighth day his sufferings were so intense that he implored the authorities to grant him the blessed opportunity of being strangulated, guillotined, burned to death, drowned, garroted, shot, quartered, blown up with gunpowder, or put to death in any conceivable way which their humanity or ferocity could invent. This will give a slight idea of the horrors of death from want of sleep.

Another California Curiosity—*Borax Lake.*—The largest borax lake, nearly two miles in extent, is situated about half a mile north of the north shore of Clear Lake, and about five miles from its foot, in Congressional Township, 13 N., and range 7 W. of the Mt. Diablo meridian, and N. 18 degrees, W. 52 miles distant from Napa City, California. The water in this lake is so strongly saturated or impregnated with borax that it can not be held in solution, and is, consequently, deposited in crystalized particles from very small to half a pound in weight in the mud below. From this lake, one and a quarter miles north, over a high ridge, is the noted sulphur bank, from twenty to thirty acres in extent, and supposed to be thirty feet thick, sufficiently pure, it is said, for the use of the mint at San Francisco. The sulphur appears to be constantly forming from a dam, steam continually rising over the whole surface. Eighty rods west from the sulphur, a hot spring arises in the edge of an arm of Clear Lake; this spring is strongly impregnated with boracic acid. Five or six miles west of this, on south of Clear Lake, is another borax lake.

From Honolulu.—C. F. Burns, an amateur practitioner of medicine and surgery, has been indicted for murder in the second degree, in causing the death of a Hawaiian by maltreatment, and sentenced to five years imprisonment.

Editorial Department.

CHARLATANRY—EMPIRICISM—QUACKERY.

If an individual would be respected, he must respect himself; and what is true of an individual in this connection, is equally true of communities, corporations, or professions. It is a lamentable admission, that certain words which do not belong to us especially, either because of their etymology or abstract meaning, are, nevertheless, now almost exclusively appropriated to us, because in our conduct is evinced their readiest explication, the whole professional life of some being a running commentary upon them. There is not any grave distinction between the graduated and ungraduated quack, and what there is, is certainly in favor of the latter. One man may use the cloak of religion in which to practice medicine; another tells you that he cures cancer and consumption. Who is the more disreputable, the liar or the hypocrite? There is less distinction still between the charlatan, whose disgusting notices, over his own signature, occupy so great a space in daily newspapers, and the physician who avails himself of the same means, but in a less manly and more insidious manner. One states that by sending a dollar to his address, you will receive an infallible cure for piles;—the other notices himself in the morning paper, in connection with an accident, which would have proved fatal, but that, connected with the unfortunate occurrence, was one so fortunate, that the patient had cause to rejoice rather than mourn, for by its means he had fallen under the care of a distinguished, polished, agreeable, skillful, and eminently successful surgeon, who, by the way, had had several precisely similar cases under his care previously, all of which had been successful, not one of them had even presented an eschar which could be distinguished by the naked eye. The one states that he possesses a sure and certain remedy for stammering, bronchitis, gout, and stricture;—the

other is noticed by some penny-a-liner who chanced to pass his office, and who, having had his attention directed thereto by hearing a merry laugh, was induced to inquire as to its source, and to his utter astonishment found that it proceeded from a patient upon whom an operation was being performed for a distorted condition known among medical men as Talipes Varus (vulgarly called Club-foot). The patient was laughing because of the pleasurable sensations induced by the operation, the operator having evinced the utmost complacency throughout, in consequence of his familiarity with such scenes. The reporter also deems it due to suffering humanity, and to persons with similar deformities in particular, to state that in all similar cases of this gentleman upon which he had operated, no rigidity whatever remained, but the feet operated upon were immediately and ever afterward, as limber as lambs' tails.

We do not distinguish between these modes of advertising, except to admire the bold, unblushing effrontery of the one, who, over his own signature, promises to cure, when compared with the duplicity of the other.

We know that the parties named are not always responsible for the comments made, but some of their professional friends frequently are; and it is to denounce such acts of mistaken favor on their part, that we write: for while lowering the subject of their eulogy in the estimation of his peers, they also debase the profession before community, and reduce it to a level with the most arrant quackery.

We have received some communications which we must decline to publish. Reflection will convince our correspondents that, as a matter of policy, it would be imprudent to do otherwise. But aside from considerations of interest or policy, we are not disposed to open our columns for personal controversy. If we should be forced, at any time, either in our own defense, or in that of our friends, to take different ground, we will endeavor to maintain it, and in doing so, will add a sheet or two, if necessary, for that purpose. Our subscribers are entitled to, and may expect to receive, 32 pages of matter in each number, every one of which will be interesting or instructive to them, that is, if we can make it so.

Our list of subscribers is becoming larger, but there is ample room for additions. We would be glad to receive encouragement, and trust that our efforts to present a first class journal, will be aided by those who are interested in the progress of medical science. We do not make this appeal as mendicants, for we intend to return more than we receive.

Independent of the fact that our subscribers will find us keeping pace with the improvements of the day, they will have 768 pages of valuable matter for binding at the close of the year. Those who do not think they will be remunerated, will not, of course, subscribe, nor do we wish them to do so.

Communications and subscriptions may be forwarded to the editors. Advertisements to the printers.

We have a sad apology to offer for any defects in our present number. Death has invaded our circle. A daughter of our friend and associate, Dr. Bemiss, has returned to her God. Her joyous laugh rang out on Christmas, and blended with the merry carols of those who sang their little pæans to bounteous Santa Claus. Fitful day on which to receive the final summons! for death, linked with the glorious birth we then commemorate, is shorn of all its terrors. The blade had not yet formed, when was heard the mandate, "Put in thy sickle and reap, for the harvest is ripe." It was executed, but so insidiously as to mock the wisdom of the wise, and defy the skill of the skillful. The messenger wore strange garments, and closed every crevice which could reflect light upon his coming. His weapon was dull, and his mission accomplished slowly; He only touched his victim, and left her many days to die.

Her life was short, but bright and lovely. We mourn our loss, but mourning, know that "of such is the kingdom of heaven."

We have received a copy of "An address to the graduating class of Castleton Medical College, delivered November 24, 1858, by Wm. P. Seymour, M.D., Professor of Materia Medica and Therapeutics," which is too racy to be passed by with this simple acknowledgment. We will give some extracts from it in our next number.

For reasons indicated, we have been prevented from commencing the Reports of the State Medical Society, as we promised. We hope, however, that we may be able to do so in our next number.

Several papers of great value are among the archives of the Society, and will be read with interest by the profession. We are happy to be the medium through which they are to be presented to the profession.

We observe with pleasure that Dr. John C. Draper has been elected Professor of Analytical Chemistry in the University of New York. His father, the distinguished Dr. J. W. Draper, remains in the chair of General Chemistry, venerated and esteemed by all who know him. If the son possesses a tithe of his father's talent, he can not fail to be acceptable to the class.

We did not receive the second article of Dr. Wible on the Nervous System, in time for this number. It will appear in our next.

A dispatch from Philadelphia, dated January 18, 1858, says: The funeral rites in commemoration of the services of thirteen Philadelphians who perished of yellow fever at Norfolk and Portsmouth, while rendering assistance as physicians and nurses, were held this morning at St. Stephen's Church. After the services by Dr. Ducachet, the remains were removed to Laurel Hill for re-interment, under the charge of Thomas Webster, jun., Trustee of the Philadelphia Committee of Relief. Citizens of Portsmouth and Norfolk, now here, participated in the ceremonies, together with a large concourse of friends and relatives of the deceased.

The schooner *Wm. M. Dodge*, from Cape Town November 27, reports the small-pox and fever raging there with great fatality. The Cape Town *Advertiser* says that if proper remedial measures had been adopted, one thousand lives would have been saved in the brief time the epidemic had been raging.

Therapeutical Department.

Glycerole de Gourdon and Oil of Cade, as a topical application in Eczematous and Impetiginous Eruptions.—Modern observers have classed resinous and empyreumatic substances, so extensively employed by the ancients, among the most powerful local applications in the treatment of herpetic eruptions. Thus, purified tar, mixed with lard, in the proportion of from fifteen to forty-six grains of the former to an ounce of the latter, is daily used in the wards of the Hospital St. Louis, as the resolvent, *par excellence*, of scaly eruptions, and as a valuable desiccative in chronic, eczematous, and impetiginous affections. Since the introduction of glycerine into therapeutics, M. Dibert employs this substance as an excipient, in preference to lard. To facilitate its use, the mixture is thickened by the addition of starch, according to M. Garot's process. This preparation possesses the advantage over ordinary ointments made with a fatty excipient, that it is removable by water.

The following is the formula of the *glycerole de gourdon:* Glycerine, one ounce; purified tar, half a drachm; add with the aid of heat, powdered starch, half an ounce. With this quantity of starch, which has been determined by M. Lecocq, we obtain an ointment of thin consistence, and easily spread. The mixture should be perfectly homogeneous.

This application allays itching (we have seen it rapidly succeeded in cases which had for several years resisted various and numerous remedies); it dries up excoriations, checks exhalation, dissipates slight cutaneous phlegmasiæ; it acts, in a word, as an astringent and resolvent without producing irritation. Thus, eczema rubrum, impetigo, intertigo, prurigo of the scrotum and anus, acne rosacea, and sub-inflammatory mentagra, are, under its influence, most advantageously modified.

Another product very well known to the readers of this journal is the *huile de cade* (oil of pitch). M. Gibert used it very frequently; but as the empyreumatic properties which this resinous oil possesses in a much higher degree than tar, are such, that it can seldom be applied in a state of purity, he usually mixes it with oil of sweet almonds, or with cod-liver oil. The following preparation is used, under the name of *huile cadee*, in the Hospital Saint Louis: Cod-liver oil, two parts; oil of pitch, one part. This application possesses very effica-

cious resolvent and drying properties. M. Gibert has seen eczemas, which had continued for months in a stationary, red, excoriated, and oozing condition, notwithstanding the external and internal use of preparations of sulphur, heal under the influence of this combination.

It is particularly in cases of obstinate pruriginous, papulous, and eczematous eruptions of the anus and genitals, which are so often such a source of annoyance to both the patient and the practitioner, that M. Gilbert has most frequently derived benefit from the local use of oil of pitch. He adds, in such cases, the diligent use of cold hip-baths, and, in order to alter the diathesis on which the eruption depends, the internal employment of Dr. Bondin's arsenical liquor, modified in the following manner: distilled water, one pint; arsenious acid, three quarters of a grain; dissolve with the aid of heat. The mixture is divided into six vials, each of which is marked for two days; half a bottle to be taken for a dose each morning, fasting, with the addition, at the moment the medicine is swallowed, of a cup of chicory, sweetened with honey. M. Gibert states that he has seen eruptions of several years' standing, and which had resisted the use of thermal waters, and of many other remedies, yield in a few weeks to this mode of treatment.—*Dub. Hosp. Gaz.* Nov. 15, from *Bull. Gen. de Therap.*, 15th August 1858.

On the External Use of Hydrochloric Acid. By Prof. V. Kletpinsky.—In the course of some investigations made with reference to the physiology and pathology of the skin, Prof. Kletpinsky found that, among all agents subjected to the test, none was as efficient in exciting the respiratory function of the skin, accelerating the capillary circulation, and influencing the action of the lymphatic and glandular system, as hydrochloric acid. Skin moistened with hydrochloric acid expired, under the same circumstances, twenty-seven to thirty per cent. more of carbonic acid, and, what is very remarkable, seven to twelve per cent. less of water, than an equal space of skin not subjected to the influence of the acid. This fact induced the author to apply the acid in a great number and variety of cases, in order to test its therapeutical efficacy. He obtained the following results:—

1. Hydrochloric acid restores and stimulates the circulation if periodically interrupted or stagnating; it thus cures frostbite and chilblain, and is an efficient prophylactic against these complaints.

2. The acid diminishes the troublesome perspiration of the hands and feet, and cures it in some cases completely, if the application is continued long enough.

3. It is an efficient remedy in a great variety of cutaneous diseases, particularly in follicular acne; by rendering the metamorphosis of tissues more active, it destroys, if steadily used, many maculæ and exudative patches of the skin.

4. It does not injure the integrity of the epidermis, if properly applied, but diminishes its roughness and callosities; like a true cosmetic, it renders the skin pliable and soft, increasing at the same time its density, and making it, consequently, more resistant to obnoxious influences.

The hydrochloric acid, which must be free from admixture of iron or chlorine, is best applied in as concentrated a condition as can be borne, without its giving rise to burning; commonly, a more concentrated acid can soon be made use of, even if it was inapplicable at the beginning of the treatment. The skin is moistened with the acid, (which was used by the author in many cases even in its fuming state,) and is washed off after a quarter of a minute, at first with water and then with soap. It is easily understood, that the hands bear most easily the concentrated acid, the feet (especially the toes) less, the forehead the least; on all sensitive places of the skin the acid must be applied more diluted and for a shorter time. It is an excellent plan to mix the hydrochloric acid with glycerin, the therapeutial action of which on the skin is hardly enough appreciated, and which in this case renders a longer application of the acid, even to a sensitive skin, practicable.—*Oesterreichische Zeitschrift fur praktische Heilkunde*, No. xii.—*North American Medico-Chirurgical Review.*

Formula for Jaser's Itch Ointment.—Of all the ointments proposed for the treatment of scabies, one of the most efficacious, and at the same time least expensive for charitable institutions, is that of Jaser. Dr. Delaharpe, physician to the Hospital at Lausanne, has used it for many years, with invariable success. The following is the formula:—

Flowers of sulphur, half an ounce; sulphate of zinc, one and a half drachms; powdered root of white hellebore, one drachm; soft soap, thirteen drachms; hog's lard, two ounces. M. Delaharpe has been for some years in the habit of adding half a drachm of caraway. The latter addition has perceptibly increased the activity of the ointment, without rendering it more irritating. A pound of the preparation costs about two shillings. Each patient requires for cure, on an average, about eight ounces.

Would it be possible, asks Dr. Delaharpe, to diminish the number of substances entering into the composition of the ointment, without impairing its antipsoric properties? I fear

not. The fat and the potash soap modify one another, and by increasing the proportion of soap, we would run the risk of having too irritating an ointment. I propose, however, to make some experiments on this point. The sulphate of zinc does not here act a corrosive part, as might be supposed, for it is completely decomposed by the potash of the soap; it thus serves to form a little sulphate of potash, and by degrees some sulphuret of zinc, by contact with the sulphur. The sulphuret of zinc may have an antipsoric action, at the same time that it contributes to diminish the itching and irritation of the skin, as zinc ointments in general do. A little hydro-sulphuric acid, which is disengaged from the sulphuret of zinc, may also favor the action of the ointment.

The powdered hellebore and essence of the caraway are the most active antipsoric elements of the compound; their quantities could not be diminished without disadvantage—I should rather endeavor to augment them; but perhaps we should have to dread a general action, in consequence of the absorption of veratria.

Further, we must not forget that the most essential condition in the treatment consists in the administration of a soap-bath on the admission of the patient. If soft soap of good quality be employed, and if the patient take care to brush or rub his skin strongly in the bath, the cure is effected in twenty-four hours. The want of these precautions, I have more than once observed, is sufficient to delay the cure by a day at least. This explains a fact which has often surprised me—the greater obstinacy of the itch in females, notwithstanding the usually greater delicacy of their skin. Through modesty or want of management they do not rub themselves sufficiently in the bath, and the action of the ointment is retarded.—*Dub. Hosp. Gaz.*, Nov. 15, 1858, from *Bull. Gen. de Therap.*, 15 June, 1858.

Action of Cod-Liver Oil in Disease of the Chest.—A report has been made to the society of Medicine, of London, by Dr. Smith, of which the following are the conclusions:

Neither cod-liver oil, nor any other fatty matter cures phthisis. Cases, when the cod-liver oil cures the disease, are very rare.

Habitually, phthisis follows its course, and it is to-day as fatal as before the introduction of cod-liver oil; nevertheless the progress of the affection is retarded in about one half the cases.

The oil fortifies and restores the patient, but the phthisis progresses, none the less surely, although less rapidly.

When the oil cannot be supported, it is principally on account of its influence on the digestive organs.

When it succeeds, it is principally in ameliorating the nutritive functions, the patients attribute to it an action on the respiratory organs.

This local influence is exercised principally on the pharynx and pulmonary mucous membrane. The oil acts almost altogether as a fatty body; it restores to the organism an element of which it is deficient. It presents no advantages over the fats used as food, and like them, can be sustained or rejected.

There are many individuals to whom the oil is hurtful; it should not be given without proper discrimination.

Cod-liver oil is a nutriment and not a medicament; finally, the oil does not touch the essentials of this disease; but the marked amelioration, which follows its use, proves the importance of fat in the animal economy.—*Gaz. Medic., Oct.* 1858.

New Researches on Alcoholic Fermentation—By M. L. Pasteur.—Contrary to the opinion generally held, I am able to affirm that not the smallest quantity of lactic acid is found in alcoholic fermentation; and whenever this acid is found, two very distinct fermentations are accomplished simultaneously. Alcoholic fermentation is accompanied by lactic acid only in rare and exceptional circumstances, and when peculiar conditions, susceptible of being reproduced at pleasure, gave rise to the yeast which I have made known as lactic yeast.

This new yeast being formed of much smaller globules than that of beer yeast, it is easy to ascertain by means of the microscope, if there is a mixture of the two yeasts, and thus to anticipate the presence or absence of lactic acid.

One question naturally presents itself: we have known, from the time of Lavoisier, that, in alcoholic fermentation, the liquor always assumes an acid re-action. If lactic acid is found exceptionally by the means which I have just pointed out, what is the cause of the acidity of the liquor?

Numerous experiments have enabled me to ascertain that it is to succinic acid alone that the acidity of the liquor in alcoholic fermentation is due. The presence of this acid is not accidental, but constant, and with the exception of the volatile acids which are formed in infinitely small quantities, it may be said that succinic acid is the normal acid of alcoholic fermentation. In whatever conditions I have hitherto operated, I have found succinic acid and glycerin, as uniformly as carbonic acid and alcohol, as regards their existence as products of alcoholic fermentation.

The immediate consequences of these results will be comprehended by every one. But I must be more reserved than any one in their discussion.—*London Chemist, Oct.* 1858, *from Comptes Rendus, Aug.* 2, 1858.

MISCELLANEOUS ITEMS FROM FOREIGN JOURNALS.

By LOUIS BAUER, M.D.

Dr. Schuppert recommends in the highest terms the aqua amygdalarum amarum against pertussis. Large doses every three hours will bring relief every three or four days. (Preuss. Vereins-Zeitung).

Dr. Bonorden (Med. Zeitung, 1858), pronounces ox-gall to be one, if not the very best remedy for resolving indurations, hypertrophy, and glandular engorgements. He states that he has repeatedly succeeded in relieving the like difficulties, that had already been threatened with the scalpel. The mode of using it is a mixture with olive oil, to which he adds ext. conii maculati, if the affections are very painful, or caustic ammonia, if they are torpid.

Herpes tonsurans and other species of this dermatic disease of cattle, have been successfully transmitted by Prof. von Barensprung, of Berlin, upon himself and Mr. Gerlash, one of the professors of the Berlin Veterinarian School. Spores were microscopically ascertained as the cause.

The Wiener Med. Wochenschrift, Feb. 13, 1858, reports that some most valuable researches have been instituted at the Imperial Hospital of Wieden, with iodide of potassium in lead poisoning, from which the following conclusions can be drawn:

1. The chemical test easily detects traces of lead in the urine, with or without the use of iodide of potassium; hence it is of great diagnostic and therapeutic importance.

2. The administration of iodide of potassium favors the elimination of lead through the urine.

3. This remedy should be so long continued until the lead disappears in the urine.

4. The elimination of lead by the uropœtic organs is co-existent with the diminution of phosphates of urea, the uric acid, and the specific gravity of the urine; whilst traces of albumen and grape-sugar appear simultaneously with lead.

5. Lead poisoning is by no means cured when the metal disappears in the urine, but only on the reappearance of phosphoric salts, and the specific gravity.

6. The diet with phosphoric food (meat and siliquosa), seems to be ineffective as long as lead eliminates by urination. The latter having disappeared, those nutriments favor in a most conspicuous manner the elimination of phosphates, and the increase of specific gravity.

7. The symptoms of lead poisoning disappear earlier than the lead in the urine.—*American Medical Gazette.*

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CHLORINATED LUNAR CAUSTIC.

By J. LAWRENCE SMITH, M. D., Prof. Chemistry Medical Department University of Louisville.

About two years ago my attention was directed to the importance of giving strength to the fused nitrate of silver, without interfering materially with its purity. I then satisfied myself of the value of the introduction of chloride of silver into lunar caustic. No practical development was given to this fact until lunar caustic became an object of manufacture at the Louisville Chemical works: I then prepared some of it, with a certain proportion of chloride of silver, in the manner to be described, and distributed it among surgeons and physicians. Having heard from many of those who have fairly tried it, I am fully prepared to submit it to the medical profession as an improved form of lunar caustic for many purposes; and I am still more encouraged to do this, from the fact that Dr. Ed. R. Squibb has lately submitted it to the pharmaceutical convention as being of sufficient importance to be added to the officinal pharmaceutical preparations of silver.

Those who use lunar caustic, know that it is subject to two objections; first, its great friability (which is also variable, dependent upon the temperature of the mould in which it is cast); and secondly, its too great solubility, so that in touching a moist surface, almost invariably more is applied than is designed or required.

Nitrate of potash and nitrate of soda are often fused with nitrate of silver, but these are objects of adulteration, and the use of them gives scope to an unlimited deterioration of this valuable caustic, and therefore should be discountenanced as much as possible; and as there is a very simple test by which

the purity of lunar caustic may be established, physicians can protect themselves against this adulteration. The test will be found at the end of this note.

To make the chlorinated lunar caustic, I originally added a small quantity of chloride of sodium to the nitrate of silver, so that when the mass was fused, about eight per cent. of chloride of silver resulted from the decomposition. This method was found objectionable, as it introduced a small quantity of nitrate of soda in the mass, so the following is the method proposed for general adoption:

Take Cryst. Nitrate Silver, - - - - 480 grs.
Dry Chloride Silver, - - - - 38½ "
Fuse the mixture, and cast in the ordinary moulds.

Dr. Squibb suggests the following method;

Take Nitrate Silver, - - - - - 960 grs.
Muriatic Acid, - - - - - 40 "
Distilled Water, - - - - - ½ fluid oz.
Mix the acid and water in a suitable vessel, add the nitrate of silver, reduce to dryness, fuse, and cast in moulds; this introduces five per cent. of chloride of silver in the lunar caustic.

Either of these methods may be employed, but I prefer, for manufactural purposes, the first formula, as the dry materials are used, and the execution of it is not subject to the delay of getting rid of water by slow and careful evaporation, and moreover the varying strength of commercial muriatic acid may make a difference in the proportions, if not previously tested.

I have placed this lunar caustic in the hands of a number of surgeons and physicians, all of whom concede to it valuable properties in reference to its solidity and diminished solubility.

It has been in the hands of Drs. Miller, Flint, Yandell, Marshall, and others in this city; Dr. Pope, of St. Louis; Drs. Gross and Bache, of Philadelphia; and the reports from them all, lead me to propose this form of lunar caustic for general adoption. As regards the exact per centage of chloride of silver to be used, this must be left to experiment by the surgeons.

A very large quantity of lunar caustic contains a greater or less proportion of nitrate of potash or other cheap salt, and as this often falls into the hands of physicians when they desire

the pure article, it is well to have a ready and simple test that every physician may apply. The following one, proposed by Dr. Ed. R. Squibb, answers the purpose perfectly well:

"A small fragment of nitrate of silver, crushed to powder with a knife-blade upon a piece of paper, the powder spread out over the paper, and the paper and powder then rolled up in a small match-like roll, twisted, set on fire, and burned, *leaves a tasteless residue of pure silver.* But if the nitrate of silver contains even one per cent. of any saline impurity, the residue, instead of being tasteless, will have the sharp alkaline taste of the base of the adulterating salt. With this test, no one need be deceived by No. 2 lunar caustic, nor by the adulteration of the crystalized nitrate with chlorate of potash, &c.; and even the small proportion of sal prunelle that is often added to the so-called pure or "No. 1 caustic" to make it run well, is detected in a minute with equal certainty. This test answers equally well for the purity of the chlorinated lunar caustic."

Instead of crushing the lunar caustic on a piece of paper, wrapping and then burning, I have found it preferable to dissolve it in a little water, moisten a piece of paper with the solution, dry it, roll the paper up and burn. By this modification I have never failed to produce complete decomposition, whereas in manipulating the lunar caustic as prepared by Dr. Squibb, I have failed more than once to produce a complete decomposition, and upon tasting the residue, found undecomposed nitrate of silver.

With these facts before them, physicians need never be deceived with impure lunar caustic.

THE NERVOUS SYSTEM.

By B. M. WIBLE, M.D.

(Continued from page 14.)

The spinal division consists, as has been stated, of: first, the spinal marrow, including the medulla oblongata, &c.; second, the nerves leading from the periphery into the spinal marrow, &c.; third, the nerves leading from the spinal marrow, &c., to the muscles. These constitute the machinery, so to speak, of the spinal division. The agent which acts through this machinery is the nervous influence, or the vis nervosa.

My intention now is to show the mode of action of the nerve influence through these structures. To facilitate this, I will first give and adopt the nomenclature instituted by Dr. Marshall Hall.

That portion of the nervous system which I have hitherto spoken of as the spinal division, Dr. Hall denominates the diastaltic system, and the action performed by it diastaltic action.

The term dia-staltic means to *contract through.* It is through the spinal cord that the nerve influence causes the muscles to contract.

To the nerve leading from the periphery to the spinal cord, the term *esodic* is applied, which means the *way in.* To the nerve leading from the spinal cord to the muscles, the term *exodic* is applied, which means the *way out.* When the nerve influence passes from the periphery to the spinal cord, the *action* is esodic, and when it passes from the spinal cord to the muscles, the *action* is exodic. We have an example of diastaltic action in the phenomenon of sneezing, produced by taking snuff. The snuff applied to the schneiderian membrane excites the extremities of the trifacial nerve. This excitation puts into activity the nerve influence—*vis nervosa*—which is conveyed from the place excited or irritated along the trifacial, an esodic nerve, to the medulla oblongata, and thence the influence is conducted along exodic nerves to the muscles concerned in the act of sneezing. The nerve influence is conveyed from the surface of the nostrils *through* the medulla oblongata to the muscles, or diastaltically.

Beside the terms esodic and exodic, there are others instituted by Dr. Hall to express the action of the vis nervosa. When the vis nervosa is sent to the spinal marrow, it may ascend, and this is expressed by the term *anodic—ascending way;* or it may descend, and this is expressed by the term *cathodic—descending way.* The term *pollodic* expresses the action of the vis nervosa as taking place in *several ways*, and the term *panthodic* expresses that the action occurs in *every way.* The importance of these terms will be more fully seen hereafter.

As has been stated, the spinal cord and the medulla oblongata are composed of gray or vesicular, and of white or fibrous

structure; the former serving the purpose of generating nervous influence, and the latter of conducting it. These structures contain a number of independent centres, as is evident from the fact that the spinal cord in some of the lower animals may be divided into two or more portions, each of which retains the power of producing muscular motion. It is altogether probable, that at the point where each nerve terminates in the cord or the medulla oblongata, there is a distinct centre, possessing a distinct function, and having a nerve leading to it and another from it, which nerves are especially related; and further, that if the peripheral extremity of the esodic nerve be irritated, its corresponding exodic nerve responds to the exciting impression. This constitutes the arc of Dr. Hall. But excited impressions sent to a spinal centre are not limited to it—they may pass upward or downward, and produce muscular motion in parts connected with other spinal centres. If, for example, in a frog deprived of its cerebral structures, an inferior extremity be irritated, that extremity will manifest strong muscular movements, but these movements are not necessarily limited to that extremity—they may extend to the opposite limb, which will move less energetically; and if the exciting impression on the inferior extremity be sufficiently intense, the superior extremities will also exhibit movements. When the inferior extremity is irritated, causing the superior extremity to move, the course of the vis nervosa is upwards, or anodic; when a superior extremity is irritated, causing movements in the inferior extremities, the action is cathodic; when an extremity or any part is irritated, causing movements upward, downward, and across—*in many ways*—the action is polodic; and finally, when an extremity is irritated, and movements follow throughout the entire muscular system, or *in every way*, as is especially the case if the animal is under the influence of strychnia, the action is panthodic.

The agent by which the nervous influence is conducted upward or downward, from centre to centre, along the spinal cord, is not definitely known, but probably it is by means of the white or fibrous portion.

The spinal cord and medulla oblongata, in addition to that of manifesting its own distinct diastaltic properties, possesses others, viz., those of conducting *sensitive* impressions from the

periphery and other parts of the body to the brain, and of conducting the mandates of the will—*voluntary motor influence*—from the brain to the muscles. The structure through which sensitive and voluntary motor influences are conducted along the spinal cord to and from the brain, is not known. Whether these influences are transmitted along the spinal cord by fibres continuous with the nerves, or by a commissural arrangement, or by the gray matter, has excited much useless speculation. (*Vide Todd & Bowman's Physiological Anatomy;* also, *Dr. Carpenter's work on Human Physiology.*) But that both sensation and voluntary motor impulses are in some way conducted along the cord, no doubt can exist. In the human subject, division of the spinal structure in any part of its length, destroys all sensation and all power of the will over the muscles of the parts which receive their nerves below the place of division.

The diastaltic nervous system is endowed with a *force*—a nervous influence—the *vis nervosa.* It exists in two conditions, viz., the *static* and the *dynamic.* The former is converted into the latter only in obedience to some excitement: thus, if a snake be divided in the middle of its length, and the portion severed from the head be placed upon some soft substance, and covered with a bell-glass so as to free it from all surrounding sources of excitement, it will not move after once having obtained a state of repose—it will remain in the same position until all vestiges of life are extinct, and until putrefaction supervenes; yet, for some hours after the reptile has been divided, this portion retains statical nerve force, which will become dynamical by means of excitation, that is, the muscles can be made to contract by excitation.

It is by the conversion of statical into dynamical force by means of excitation, that many of the most important functions of the body are performed. Thus the important act of respiration is induced by the exhaled carbonic acid in the air-cells, exciting the peripheral extremities of the pneumogastric distributed to the cellular structure of the lungs; liquids and food in contact with the mucous membrane of the pharynx, where the glosso pharyngeal is distributed, excite the act of swallowing; indeed, all the acts of ingestion and egestion in the animal economy are excited acts.

The *vis nervosa* is capable of certain modifications. There may be augmentation or diminution of the *static force*, and augmentation or diminution of the dynamical force. We find examples of great augmentation of the static force in cases of tetanus, and in all diseases attended with tonic contractions of the muscles. The phenomenon of *muscular tension* is probably due to this static force: Dr. Hall, however, was inclined to believe it to be an excited function, produced by the contact of the air, clothing, and other physical agencies, with the peripheral extremities of the esodic nerves.

The inherent tonicity of the muscles, and its variableness in degree, must be taken into account in judging the influence of the nervous system over the muscles.

Diminution of the static force is found towards the close of many fatal diseases, in all cases where there is great muscular relaxation, and as the effect of chloroform, hydrocynic acid, and various narcotic and toxical agents.

Augmentation of the excitability, or dynamic force, may co-exist either with increased or diminished static force. We find increase of the excitability when the system has suffered from loss of blood, from exhausting diseases, and especially from the persistence of some peripheral irritation, as that which produces tetanus; and we find it also to be produced by strychnia and other agents, which at the same time increase the static force.

In *tonic* muscular contractions of an abnormal character, as they occur in disease, there is both augmentation of the excitability and of the static force, whilst *clonic* convulsions are attended with augmented excitability, and perhaps diminished static force. In perfect health there is the minimum of excitability compatible with the performance of the functions of the body.

A diminution of the static force is generally attended with increase of excitability, but when the former is greatly reduced, as it is sometimes in disease, or from certain poisonous agents, excitation fails to manifest the dynamical property. It is paradoxical that when there is full *power* to act, the *action* should be less readily manifested than when the power is partially exhausted; such appears to be the case, however, in reference to the nerve force.

The phenomena appertaining to the vis nervosa will be more fully discussed hereafter, in speaking of them in connection with disease. They require a more rigid investigation than has been hitherto given them. It has appeared to me that a rich field is afforded for observation and experiment, in comparing the different effects produced on the nervous system of animals by chloroform, atropine, conium, opium, strychnine, hydrocyanic acid, and other agents.

(To be continued.)

EXTRACT FROM MINUTES OF THE SOCIETY FOR THE ADVANCEMENT OF NATURAL SCIENCES, OF LOUISVILLE.

Furnished by W. N. HAILMAN, Secretary.

JANUARY 17, 1859.

The committee on Table-Salt did not report, and asked for further time. Granted.

Mr. Ed. Scheffer, one of the members of the committee, made, however, some remarks. Before answering the question whether chloride of sodium is a necessary part of the animal food, he thought it necessary to answer another question: Does animal life require soda combinations? If this question is answered, the former is useless. The great number of analyses made on this subject by many of the best physiologists, such as Lehmann, Schmidt, Virchow, Bernard, etc., show that all the humors in the animal body which have an alkaline test, contain soda in preference to potash; those which have an acid test, contain more potash, especially if the acid reaction is caused by hyperphosphates. In muscles, especially, soda disappears almost entirely: they show an acid reaction, and contain a comparatively great proportion of salts of potash, particularly phosphates and chlorides. Soda combinations prevail, especially in the blood (not, however, in the corpuscles), the chylus and the lymph. These fluids have always a decided alkaline reaction. Also in the bile (whose reaction is, however, not decidedly alkaline), acids seem to show preference to soda.

The ashes of the food of herbivorous animals contain scarcely any soda, but mostly potash; nevertheless, analysis constantly finds in the blood of these animals three parts of carbonate of soda to one part of carbonate of potash: they must then obtain their soda from some other sources. We can only conclude, then, that soda is necessary for animal life. We always find

it in the blood and other humors, and in various tissues of the body, and from this we infer that it *must* be there.

It might be asked now, but why just the *chloride of sodium?* why not the *phosphate or sulphate of soda?* Probably because the chloride is of more frequent occurrence and more palatable than the rarer phosphates and sulphates, which have besides a disagreeable taste.

The question, how does chloride of sodium act in the body, is hard to decide. A great part, no doubt, decomposes the potash combinations in the vegetable and animal food by reciprocal affinity, in order to make them more fit for assimilation.

The carbonate of potash or soda which we find in the ashes of the blood, exists in normal blood always in a caustic state, combined with albuminous substances, and what physiologists call albuminates. This causticity is the cause of the alkaline reaction of this and other humors. Chloride of sodium is itself, under certain circumstances, a solvent of albuminous substances.

The assertion of Dr. Meyn, that table-salt produces flesh, is contradicted by some experiments of Boussingault. These experiments were made on a certain number of cattle, in the following manner: After weighing the cattle carefully, he divided them into two sets; to each a certain equal quantity of certain food was given, with this difference: one set received salt, whilst the other was deprived of that luxury. After some months the cattle were weighed again, and it was found that the one set had gained as much as the other, only those that had received salt were livelier, had finer hair, and in fact, their whole external appearance was better.

Mr. Scheffer then made the following statements in regard to the proportion of chloride of sodium in various humors of the human body:

Human blood	.421	per cent.
Solid constituents of the blood	1.931	" "
Ashes of blood	57.641	" "
Serum	4.60	" "
Solid constituents of serum	4.919	" "
Ashes of serum	58.974	" "
Bile	.364	" "
Saliva	.153	" "
Human milk	.87	" "

These statistics are taken from the zoo-chemical part of the Manual of Chemistry, by Leopold Gmelin.

Vestiges of Creation.—The author of this work is now ascertained to be Mr. Robert Chambers, of Edinburgh.

MORTALITY OF THE CITIES OF PROVIDENCE AND NEW YORK.

We have received from our friend and correspondent, Dr. E. M. Snow, the City Registrar of Providence, R. I., the mortuary returns of that city for 1858. We copy the entire tables, together with the explanatory remarks by Dr. Snow, at the same time assuring the reader that Dr. Snow's qualifications and precision in the discharge of his duties, give a guarantee of the complete correctness of his reports. We also copy from the New York Herald, some remarks on the mortality record for 1858, in that city.

Deaths in the City of Providence during the year 1858, *compared with the deaths in* 1857.

	1858.	1857.	Difference.
Whole number	1017	925	92
SEX.			
Males	502	443	59
Females	515	482	33
CONDITION.			
Married	255	257	2
Single	656	560	96
Widows	78	85	7
Widowers	28	23	5
COLOR.			
White	967	874	93
Colored	50	51	1
NATIVITY.			
Born in the United States	826	748	78
Ireland	150	143	7
England, Scotland, and Wales	30	20	10
Germany	5	4	1
Other countries	6	10	4
PARENTAGE.			
American	512	523	11
Irish	411	225	86
English, Scotch, and Welch	66	54	12
German	13	13	0
Other foreign	15	10	5
LOCALITY.			
Deaths in Ward I	182	201	19
" " II	60	60	0
" " III	150	159	9
" " IV	90	70	20
" " V	169	135	34
" " VI	188	128	60
" " VII	128	133	5
Public Institutions	50	39	11
Whole city	1017	925	92

Seasons.			
January—March	279	214	65
April—June	278	173	105
July—September	257	286	29
October—December	203	252	49
Whole year	1017	925	92

Ages.	1858.	1857.
Under one year	209	198
One and under two	129	104
Two " five	123	75
Five " ten	53	27
Ten " fifteen	19	16
Fifteen " twenty	29	39
Twenty " thirty	81	97
Thirty " forty	97	98
Forty " fifty	63	57
Fifty " sixty	61	66
Sixty " seventy	62	52
Seventy " eighty	54	59
Eighty " ninety	32	30
Ninety " one hundred	5	6
One hundred and over	0	1
Total	1017	925

Causes of Death.	Three Years. 1858.	1857.	1856.
Accidents (various	13	17	13
" Burns & scalds	1	5	8
" Drowning	5	3	5
" Poisoning	2	1	1
Anæmia	8	2	2
Apoplexy	15	18	21
Asthma	2	1	1
Brain, Congestion of	6	15	15
" Inflammation of	14	7	5
" Disease of	5	8	6
" Softening of	3	2	4
Bronchitis	6	3	5
Cancer (all kinds)	19	18	15
Cholera Infantum	49	50	57
Cholera Morbus	2	2	5
Consumption	168	180	178
Convulsions	23	33	51
Croup	27	28	26
Colic	2	3	4
Debility (infantile)	18	8	13
Diarrhœa	27	38	29
Diptheria	5	0	0
Dropsy (all kinds)	17	12	20
Dysentery	12	29	35
Enteritis	8	5	6
Erysipelas	9	10	4
Exposure and neglect	5	4	0
Epilepsy	6	0	2
Fever	2	0	2
" Typhoid & Typhus	20	29	27
" Southern Bilious	2	1	1
Gastritis	3	0	3
Heart, diseases of	35	31	21
Hemorrhage	7	0	6
Hooping Cough	7	2	10

Causes of Death.	Three Years. 1858.	1857.	1856.
Hydrocephalus	46	32	28
Insanity	10	12	14
Intemperance	4	6	5
" Delirium Tremens	7	6	2
Influenza	3	11	0
Kidneys, diseases of	7	7	4
Liver, diseases of	10	7	3
Marasmus	23	24	41
Measles	40	2	1
Malformations	6	10	2
Murdered	1	0	0
Old age	38	30	24
Parturition	8	8	10
Paralysis	3	9	2
Peritonitis	5	4	15
Pneumonia	76	53	63
" Congest'n of lungs	13	9	11
Purpura Hemorrhagica	5	1	1
Pleurisy	2	0	1
Rheumatism	1	5	1
Scarlatina	72	32	144
Scrofula	9	4	5
Suicide	4	2	1
Stomach, diseases of	2	6	1
Syphilis, congenital	3	0	2
Tape Worm	1	1	0
Tabes Mesenterica	4	3	1
Teething	17	17	7
Thrush	3	2	1
Tumor	4	6	3
Unknown cause	21	26	37
Other causes (as given)	16	25	34
Totals	1017	925	1065

MORTALITY OF THE PAST YEAR.—We have published a table showing many particulars in relation to the mortality of Providence, during the year 1858, and also comparing each particular with the previous year. That table is complete, and probably gives the facts relating to every death that occurred in the city during the year.

The number of deaths in 1858 was 1017, or 92 *more* than in 1857, and 48 *less* than in 1856. The average annual mortality in the city, during five years past (1854-'58), has been 1053, or 36 more than during the past year.

As usual, a larger number of females than males died during the year, but the difference is less than in 1857. In regard to the mortality of the sexes, there is a remarkable difference between the American and the foreign population. During the year 1858, the mortality was as follows:

American parentage, 218 males, 294 females.

Foreign parentage, 284 males, 221 females.

The mortality of the colored population is very uniform, the number of deaths, during four years past, having been as follows, commencing with 1856: 56, 48, 51, 50. In proportion to the population, the number of deaths in 1858 was very nearly as follows:

White American population, one in 57.
Colored " " one in 28.
Foreign " one in 39.

For the whole population, the deaths were about one in 50.

The large proportional mortality of the colored population, is undoubtedly owing to causes inherent in the race itself in this climate. The excess of mortality among the foreign population is owing to the obvious neglect of sanitary precautions, and particularly to the bad management and unnecessary exposure of infants and children.

Some apologists for the excessive mortality of New York city (about one in 30 of the population), say it is entirely owing to the presence of the foreign population; and that were it not for this class, the mortality of that city would compare favorably with that of other cities. There is no doubt that the presence of the foreign population in New York increases the mortality there, and it has the same effect here and in other cities. But how does it happen that the same class of foreign population is so much more healthy in Providence, than the whole population of all classes in New York?

As we have said, the mortality of Providence in 1858 shows an increase of 92 deaths over the previous year. This was caused by the presence of epidemic measles and scarlet fever during the last winter and spring. During the first six months of the year, the number of deaths was 170 *more* than during

the corresponding period in 1857. During the last six months of 1858, including the usually sickly months of July, August, and September, the city was remarkably healthy, the number of deaths being 97 *less* than during the first six months, and much less than during the same period for many years.

During the last winter and spring, there were several thousand cases of measles in the city, and 40 deaths were reported from this cause. Of this number, 7 were American and 33 foreign children, and in nearly every case the disease was complicated with inflammation of the lungs, showing that death resulted not from measles alone, but from want of care, and exposure producing pneumonia.

Seventy-two deaths were reported, during the year, from scarlatina, of which two-thirds were during the first five months. For some years past, this mysterious and fatal disease has added much to the mortality of this city, as well as of the country generally. Less is known in relation to its causes than in relation to the causes of almost any other disease; and it seems thus far to baffle all sanitary investigation, and bid defiance to all sanitary precautions. Unlike most other epidemics, it visits equally the city and the country — the solitary farm house and the thriving village — the river-side and the hill-top; and often exhibits its most terrific powers where, judging from the known laws of epidemics, it would be least expected.

It knows no distinction of classes, but destroys alike the children of native and of foreign parentage, and carries desolation as often to the homes of the rich as of the poor. It sometimes seems to arise from contagion, but again it often appears where contagion is impossible. Sometimes it destroys life in a few hours; sometimes the sufferer lingers for weeks; and, not unfrequently, when life is spared, the effects of the disease remain during life, in the loss of hearing and of speech.

Only a single month, during the last five years, if not longer, has passed without the record of deaths from this disease in this city; but all seasons are not alike in regard to its prevalence. It prevails most extensively in the winter, commencing in November and December, reaching its greatest mortality in March or April, and declining with the approach of summer. A very large majority of its victims are between two and seven years of age.

The disease has been so prevalent in the city during the last three years, that it seems hardly probable that it will prevail with much severity during the present winter.

Inflammation of the lungs was unusually prevalent in connection with measles and scarlatina, and the number of deaths from this disease, in 1858, was larger than in any year since 1840. A large portion of its victims is found among children

of foreign parents, and its most active cause is exposure, without proper clothing, to the changes of the weather.

The remarkable exemption of the city from small-pox and varioloid still continues; not a single death from that disease having occurred for more than two and a half years.

Those interested in the subject will find other topics for reflection and comparison in the published table.

E. M. S.

Deaths, Births, and Marriages in New York City, for the year 1858.—In accordance with our usual custom at the commencement of each year, we publish the vital statistics of the city for the preceding twelve months. The tables, showing the number of deaths from the various diseases, possess much interest, not only for the medical fraternity, but for all who are concerned in the health of the great metropolis, and on this account for none more than the inhabitants themselves. The silent lessons which they teach are full of meaning, as they should be of practical value to our citizens, and yet there is no city perhaps in Christendom where less attention and care are paid to the laws of hygiene. With a location which can hardly be surpassed for its healthiness, with a system of sewerage that improves every year, with an abundance of the purest water flowing in subterranean pipes beneath every street, with a climate equal, if not superior, to that of any city on the whole continent—with all these advantages in its favor, the mortality of New York exceeds that of many of the most unhealthy cities in the world. When we look into the statistics before us, the cause of this excessive mortality becomes painfully apparent. They explain at once the reason, although they will doubtless fail, as such statistics have heretofore failed, in pointing out the remedy. The cause, as we have said, is painfully apparent, and may be found in the reckless indifference to the value of human life which is so prevalent among us. We do not allude to the number of deaths from what are so improperly called accidental causes, but to the fatal diseases engendered by individual carelessness, among which we may enumerate a large portion of those which are put down to the credit of consumption and other diseases. Of consumption, not less than 3,194 died, which is about one-eighth of the whole number; but how much of this mortality was produced by reckless exposure it would be impossible to say. We believe it would be unfair to attribute this to our climate, and we are constrained, therefore, to adopt the opinion that the cause must be looked for in the carelessness of the people themselves. It is somewhat singular that the deaths from this disease bear about the same proportion every year to the total amount set down in the bills of mortality. Consumption, in fact, stands

always at the head of the list of fatal diseases, and numbers more victims than any other on the record of death. Next on the list is infantile convulsions, of which 1,655 died, and after this comes cholera infantum, from which the deaths were 1,503. Then we have the still-born cases, which always occupy a conspicuous place in the mortality tables, and which this year are put down at 1,488. It is said, and it may be well to state here, that many of the cases enumerated under this head are abortions, and that the practice of procuring such is carried on to a fearful extent in New York. To these still-born cases, so called, may be added the premature births, of which there were 434 during the year just closed. There were five deaths from yellow fever—a fact which we notice simply to show that the disease can exist among us without necessarily becoming epidemic, and also to prove that the mere presence of it in the city affords no reasonable cause for alarm.

As usual, the children have contributed the largest number of recruits to the ranks of death, and of the whole mortality, 8,568, or more than one-third, were under one year old, while of children under ten years, 14,939 died. It may be gratifying to know, as an offset to this, that 719 lived to between sixty and seventy, 488 to between seventy and eighty, 197 to between eighty and ninety, 39 to between ninety and one hundred, and 6 to over one hundred. The deaths among males are, as is almost always the case, more numerous than amongst the females, as may be seen from the following comparative figures:

Men	4,431
Women	4,298
Boys	8,228
Girls	7,528

From the table giving the classification of diseases, it will be seen that those of the throat and lungs are most destructive to human life, and number 6,543, while there were 6,015 deaths from diseases of the stomach, bowels, and other digestive organs. There is one feature in this table which is deserving of particular notice, as indicating either a remarkable amount of ignorance among a portion of the medical profession, or a lamentable falling off in medical science itself. We refer to the deaths which are set down as unknown, and which reach the large number of 61. Of killed or murdered there were 46 cases; of suicide, 77; of drowned, 157; of casualties, 148; of fractures, 62; of accidental suffocation, 20; of sun stroke, 34; and of burned or scalded, 118.

Of the whole number, 3,825 were born in Ireland, 1,455 in Germany, 17,515 in the United States, 470 in England, 169 in Scotland, and 102 in France. The greatest excess of mortality was in July—deaths 2,747. June was the lowest—deaths 1,576.

PROCEEDINGS OF THE COLLEGE OF PHYSICIANS AND SURGEONS OF LOUISVILLE.

HENRY MILLER, President.
LEWIS ROGERS, Vice-President.

Reported by S. M. BEMISS, M. D., Secretary.

EIGHTH MEETING, TUESDAY, Nov. 9, 1858.

Dr. Wible proposed the following written inquiry as a subject of discussion; "When is blood-letting an important agent in the cure of disease, and is there a substitute for it?" He stated that he wished an expression of some opinion from members in regard to the propriety of the almost entire abolition of blood-letting from our list of remedials; he knew that in medicine as in dress, fashion was often allowed too much influence. He would state, (on general principles,) that blood-letting was most useful in inflammations of surfaces lining closed cavities, and in all cases where especially demanded, he knew of no substitute for it. He has in his own practice lamented the failure to resort to this measure in more than one instance. In a case of peritonitis, in a healthy male, aged twenty-four or five, which ultimately terminated fatally, he had always regretted not having placed his patient in an upright posture, and bled from a large orifice instead of applying twelve leeches, as he had done. In pleurisy it is not less important if practiced at the onset, but if effusion have occurred, it is no longer advisable, as we should then husband the strength of the patient. Even in weakened conditions of constitution it is better to bleed than to trust to natural resolution. Thinks one great good of the lancet is in purifying the blood, not by the amount of peccant material abstracted with the effused blood, but by the increased secretion which follows blood-letting; for instance, we see perspiration nearly always produced by loss of blood. In fever, he thinks venesection contra-indicated; in typhoid fever, it is not borne; in erysipelas, it is of doubtful propriety—probably at the very onset of this disease it may be useful; Armstrong has recommended it. In pneumonia, we may by early bleeding effect a more speedy cure; but, in his opinion, tuberculosis is often the sequence of venesection in pneumonia. He was prepared to believe that too frequent bleeding, under any circumstances, might induce this diathesis. He had once had under his notice a family of eight children who had all died before reaching thirty, and he attributed their early death to the fact that their father was an expert in bleeding, and being in the habit of bleeding for his neighbors had gotten to bleed his own children in every ailment which visited them.

Dr. Bayless remarked, that he would not ignore the use of the lancet in pneumonia, on the contrary, he thinks it may be employed advantageously in uncomplicated pneumonia, and in patients who, possessing good constitutions, are young and vigorous. Under these circumstances, we bleed with immense advantage to the patient. To secure this advantage, however, the measure should be early practiced, before full congestion occurs. At this time blood-letting relieves the pain, relaxes the system, removes the congestion, and lightens the labor of the lungs, because it detracts from the quantity of fluid to be driven through them; the only possible objection to the measure is, that later in the disease it cuts down the powers of the patient. He is confident that statistics will bear him out as to the propriety of bleeding in sthenic pneumonia in young patients. May possibly repeat bleeding, but cautiously, on the first or second day of attack; so late as fourth or fifth day it will be different, for then exudation has occurred. He would have been gratified to have heard the gentleman's opinion as to the applicability of blood-letting as a remedy in cerebral affections.

Dr. Hardin.—There is one condition in which I conceive blood-letting to be imperatively demanded and altogether without a substitute—that is, puerperal convulsions. It is then urgently called for, not as a remedy so much as a prophylactic—a means of preventing cerebral effusion and apoplexy. In pleurisy or pneumonia he is doubtful if it is ever useful. We can not positively diagnose pleurisy until exudation has occurred; then if we admit the rule that we are not to bleed after exudates are poured out, we are debarred from employing it at all in both pleurisy and pneumonia, since we can not determine their existence unless exudation has already taken place. He is, moreover, doubtful whether we diminish the engorgement of a part by general blood-letting. Thinks we can control and reduce hyper-arterial action better by the veratrum viride than by blood-letting. Yet he would not ignore blood-letting altogether, for in addition to the condition he had already mentioned, in which he advocated its employment, he thinks we might without impropriety, probably with advantage, bleed in both pleurisy and carditis where there was great dyspnœa, as a relief to nervous element; but as a general rule thinks veratum viride an adequate substitute. One thing is certain we are now better practitioners than some years ago, and we bleed less.

Dr. Bayless has yet to learn that pneumonia may not be recognized before exudation has occurred. Thinks the rude respiration attending the congestion previous to exudation is sufficiently pathognomonic; but even the first exudation pro-

ducing crepitus may also admit the lancet, but after the tubes are rendered impervious by exudation, then blood-letting is contra-indicated; also pleurisy may be detected by general symptoms before exudation has occurred.

Dr. Hewitt does not see why he who should desire to protect the brain from injury by blood-letting should not also desire to protect the lungs by the same method. In conditions of too much blood, termed plethora, why may not blood-letting also be resorted to? He differs from those gentlemen who think that pneumonia may be recognized by rude respiration; capillary bronchitis is also attended by rude respiration.

Dr. M. Goldsmith remarked, that it was hard to say in what particular cases blood-letting is appropriate. It did not seem to him proper to say abstractly that it was proper or improper in any particular disease without regard to attending circumstances; for instance, in pneumonia, which is a disease differing greatly in type—the pneumonia of Vermont, a simple pneumonitis—was very different from the pneumonia of Kentucky. In a number of conditions of disease, certain especial circumstances call for bleeding, and in such cases there is no substitute. Opium is nearer a substitute than any thing else. In those cases of enteritis, popularly called "bilious colic," he sets the patient up and bleeds from a large orifice; it was the most successful treatment. We do not know enough of the effects of blood-letting upon the constitution of the blood to determine when it should be practiced; at present it was an empirical remedy.

Dr. Thomson stated, that in plethoric patients with robust habits, attacked with acute disease, he had had more successful results with blood-letting than with any other practice. Even with the good effects derivable from veratum viride, would not like to dispense with blood-letting.

Dr. Hall does not bleed frequently; not so much now as at the outset of his practice. Its use had been empirical in his hands. He places so much confidence in its benefits in pleurisy, that he would not promise to treat a patient with that disease who would not submit to bleeding. The veratum viride had been more beneficial in his hands in weakened and delicate conditions of the system.

Dr. Ronald, if obliged to confine himself to any one remedy in combating inflammation, would select as his means either general or local bleeding. He also wished to speak of its good effects in rigidity of the os-uteri retarding labor. Had seen in this condition the happiest results from blood-letting.

The President remarked, that the frequent reference to veratum viride reminded him that he had that day received a pamphlet, setting forth in strong statistics the good results of

treatment of yellow fever by veratum viride and gelseminum sempervivens. The President read some interesting extracts from this pamphlet, when it was, by his request, placed among the literature of the College.

Dr. Wible differs in regard to indications for blood-letting from each of the members who had addressed the chair upon this subject. In erysipelas, Armstrong's usage was to bleed in its very incipiency and give three grains of opium. He thinks it good practice; but he can not understand why a gentleman should want to bleed the plethoric and vigorous patient and not him who was of weak and broken down constitution; it was in these latter conditions, that inflammation runs most riot and does most mischief. Yet he is happy to concur with Dr. Hardin in opinion that we can cure pneumonia as quickly and perfectly without the lancet as with it. With regard to cerebral affections, concerning which a member had solicited his opinion: In arachnitis, he considered bleeding as essentially important; even in tubercular arachnitis he would advise bleeding. In puerperal convulsions, it may be necessary to let blood to prevent apoplexy; but we should in these cases bear in mind that loss of blood increases in its tendency the mobility of the system, and the convulsions may be aggravated; happily we have in this condition chloroform, which is a better reliance. It is true that we may not know the effect of blood-letting upon the intimate constitution of the blood; yet we never bleed to get rid simply of the red globules, for he is not disposed to believe there is any pathological condition in which there is a redundancy of red globules, they are the very vivifying materials of life, but we often bleed simply for the purpose of promoting secretion. It is very rare that free venesection is not followed by free, often profuse, perspiration. He had used veratum viride in a case of rheumatic carditis, but failed to bring down the pulse of his patient. He thought it too new a remedy, and that too little was known of it for gentlemen to feel that they had authority to advocate its claims as a substitute for so important a therapeutical agent as blood-letting. Its benefits in yellow fever he fancies are confined to the fact that it did away with the sin of hypermedication, which he was satisfied too often added to the fatality of epidemics of that disease. He would rather in rigidity of os-utero in a parturient woman trust to the well known efficacy of chloroform than to drain away her vital fluids when she may be subjected to further, and it may be fatal, loss of blood.

Dr. Hewitt stated that he was laboring under error if there was not a state of disease in which the red globules were too abundant.

Dr. Wible replied that there was a condition of plethora for which medical advice was often solicited, but he was not aware of any authority which established that this or any other state of disease was dependent on superabundance of red globules.

Dr. M. Goldsmith read some remarks on cataract.

Dr. Miller inquired, if couching was entirely given up?

Dr. M. Goldsmith.—I think so generally. I can not point to a single case in my practice in which it has proved permanently successful. In answer to an inquiry, has not extracted often; thinks he has lost one eye in four in extraction.

Dr. Hardin had a case of diahetes mellitus in his own son. He had had a brother to die of this disease. The lad had typhoid fever, from which his convalescence was so slow as to lead to a close investigation of the obstacle to his improvement. He found his urine amounting to four pints in twenty-four hours, of specific gravity 1.032, and giving, upon application of careful chemical tests, unequivocal indications of presence of sugar. He adopted Budd's plan of treatment, and encouraged saccharine diet; also gave iron. The patient is gaining in flesh, vigor, and healthy color. The urine to-day has specific gravity 1.014. It illustrates, so far as it goes, the correctness of Budd's theory, that use of sugar should be encouraged in diet to replace loss.

Dr. Brandeis related case of injury in a boy aged fifteen. The boy had fallen from a height and had fractured femur midway of bone, had also fractured the radius and dislocated the humerus at its lower extremity, and the end of this bone had perforated the soft parts and appeared protruded through his coat, stripped of its coverings, for two or three inches. The bones were re-adjusted by aid of Dr. Bayless, and the boy appeared to be doing well. The injuries were all on the left side, and there was some pain in the region of the heart, leading him to fear endocarditis.

Ozone and Influenza.—The Registrar-General for Scotland says: "When first the substance ozone was discovered, catarrhal affections were ascribed to its excess in the air; but during the past month, neither in the neighborhood of Glasgow or Greenock, where these affections have been so virulent, has this substance been able to be detected for days in succession, so that instead of an increase, there has been an almost complete absence of that element in the air."—*Medical Times and Gazette.*

Editorial Department.

Dr. Sanger's History of Prostitution, prepared by request of the Governors of the New York Alms House, presents a melancholy view of the depravity of that city, and a series of statistics which demand the earnest attention of true philanthropists. There will necessarily arise from the facts which he presents, a full and general discussion of a question often mooted in this country, but as often hushed by morbid delicacy, or a moral fear to meet the issues involved. We allude to the question of legislative interference, for the purpose of inducing cleanliness among abandoned women, placing soap and water at the gates which lead down to hell, and examiners, ycleped physicians, to do the menial work of pronouncing upon their cleanliness.

This is the great desideratum to be attained. Our brothels are filled to overflowing. In one of our cities, 74,000 new cases of venereal disease are of yearly occurrence; 7,850 prostitutes walk its streets, and their average longevity is but four years, and all for lack of soapsuds. Let us then resort to the European plan. As we have our sea-going vessels examined for insurance, so should we also have our land craft. Let us then appoint a board of physicians whose dignified duty it shall be to examine and report upon their fitness for service. Since the fear of punishment and the horrors of a loathsome disease are insufficient to restrain vice, let us see what the assurance of safety and promised immunity from disease will accomplish.

But will all this painstaking be salutary. Has it in Europe tended in the remotest degree to the discouragement of the vice it aims at. Your cases of disease may diminish in numbers, but will not the frequenters of brothels become increased, in a ratio compared to which the former good becomes in its connection a terrible evil. If you take one step in this wise,

you enter the opening wedge to social happiness, and rob us of the most glorious and just pride of our patriotism — American homes. Touch their sacredness, touch their purity — lessen the light which gives loveliness to their associations, and then adieu to all our greatness as a nation, a greatness which we owe entirely to our women and our homes.

Let us then study well the influence which legalized prostitution reflects upon society, and it may be that we will find sufficient data to enable us to draw conclusions favorable to ourselves. Legislative action can only be salutary when based upon an appreciation of the fundamental difficulties to be overcome, and first in the order of these, is doubtless faulty education of both sexes in youth. Another is faulty example. If less were spent on dress and ornaments, our brothels would not be so full, for it is generally by the appearance which she presents when compared with those she meets, that a young girl first begins to measure herself in society. Another glowing evil is the trifling stipend which girls receive for honorable services. These are but few, when compared to the many incitements to evil, which result from a fatal adherence to what we term fashion — but which, alas! seems to be too frequently based on passion. The bared shoulders and low-necked dress, the sandalled foot and waltz and polka, the theatre and opera, all conduce to results known and appreciated by the veriest tyro in physiological science. Our anti-democratic aping of aristocratic Europe, is pregnant of evil; and had we adhered more closely to the simplicity which characterized our early history as a people, we would not now be compelled to make the record that three-eighths of our prostitutes are native born. The work commends itself to the careful consideration of every lover of his country or his race.

The following are the conclusions at which Dr. Sanger arrived. His facts are valuable, but, as indicated, we are not prepared to agree with him in thinking that we should resort to the European plan, which, however, is not by any means of European application.

There are six thousand public prostitutes in New York.

The majority of these are from fifteen to twenty-five years old.

Three-eighths of them were born in the United States.

Many of those born abroad came here poor, to improve their condition.

Education is at a very low standard with them.

One-fifth of them are married women.

One-half of them have given birth to children, and more than one-half of these children are illegitimate.

The ratio of mortality among the children of prostitutes is four times greater than the ordinary ratio among the children of New York.

Many of these children are living in the abodes of vice and obscenity.

The majority of these women have been prostitutes for less than four years.

The average duration of a prostitute's life is only four years.

Nearly one-half of the prostitutes in New York admit that they are or have been sufferers from syphilis.

Seduction, destitution, ill treatment by parents, husbands, or relatives, intemperance, and bad company, are the main causes of prostitution.

Women in this city have not sufficient means of employment.

Their employment is inadequately remunerated.

The associations of many employments are prejudicial to morality.

Six-sevenths of the prostitutes drink intoxicating liqors to a greater or less extent.

Parental influences induced habits of intoxication.

A professed respect for religion is common among them.

A capital of nearly four millions of dollars is invested in the business of prostitution.

The annual expenditure on account of prostitution is more than seven millions of dollars.

Prohibitory measures have signally failed to suppress or check prostitution.

A necessity exists for some action.

Motives of policy require a change in the mode of procedure.

We have received a pamphlet report of "A Case of Aneurism of the Right Femoral Artery, cured by Digital Compression, with Remarks and a Statistical Report of Twenty-two Other Cases treated by this Method, by Samuel W. Gross, M. D."

We hail with satisfaction the onward and triumphant march of conservative surgery. The knife may glitter and illumine the fame of the operator and dazzle observers, but its most

dexterous and laudable exercise fails to convey that peaceful self-satisfaction which results from the adoption of a treatment which obviates its use.

In the case of Dr. Gross, digital compression was applied for forty-five hours and fifty-five minutes, and the success which attended his treatment must have been exceedingly gratifying not only to his patient and himself, but also to the gentlemen who so faithfully assisted him. From his summary we perceive that of the twenty-three cases, seventeen were treated by digital compression only, and of these eight were unsuccessful, whereas the remaining six which were treated by digital and mechanical compression were all cured, and not only so, but of the eight cases in which digital compression alone failed, seven were subsequently treated and cured by ligation or mechanical compression, although in one of them gangrene supervened and amputation was performed. We can not, therefore, entirely concur in the sentiments of the author as conveyed in the last paragraph of our quotation from him. He says:

Conservatism in surgery is a term unknown in the vocabulary of some men, but those who do know it, and freely employ it, lead certainly a more quiet and conscientious, if not a more brilliant life. The advantages of compression over the ligature may be stated in a few words. It is a more simple, safe, and certain procedure, and, if persevered in, will almost always be successful. It is not followed by secondary hemorrhage. There is but little danger of erysipelas, suppuration of the sac, phlebitis, and gangrene. Constitutional effects are not so apt to succeed it. There is no danger of neuritis and purulent collections in the common sheath of the vessels. The length of time required for the cure, and the suffering are not so great. The mode of cure more closely resembles that effected by nature, and is apt to be more permanent, especially if the ligature be not applied at a distance from the sac; in cases where the ligature is near the sac, a loose coagulum may form, and secondary aneurism may ensue. Lastly, and not the least reason of all, is that the surgeon does not feel that anxiety for his patient, as is always the case after a capital operation.

It is not necessary to adduce facts in substantiation of the above statements, for the records of all cases abundantly prove their validity.

As instrumental compression has such advantages over the ligature, so pressure exerted by the fingers possesses some advantages over that made by apparatus. Thus, it is quicker

and less painful; it can be regulated better, and in some situations can be made to act upon the artery alone; it is applicable when apparatus is not; and in cases in which mechanical contrivances can not be borne, it can be used to excite a tolerance of the skin previous to their employment.

LIQUOR CINCHONÆ HYDRIODATUS AND LIQUOR CINCHONÆ HYDRIODATUS CUM FERRO.

We regard these preparations, the formulæ of which will be found in our next number, as of so much value, that we place before our readers the following notice of their discovery and therapeutic application.

In the London Lancet for August, 1856, J. C. Christopher, Esq., published an article on the treatment of "Secondary Syphilis by a new preparation of Iodine." In this paper the author states truly, that we meet with cases of this disease which resist the ordinary means of treatment, and that his object was to attract the attention of the medical profession to a preparation of iodine which embodied all the virtues of that drug, while it was at the same time free from its irritating properties. As an evidence that the Liquor Cinchonæ Hydriodatus answers the expectations announced above, Mr. Christopher affirms that it has, in his hands, effected cures of cases of constitutional syphilis which had failed to be relieved by other forms of iodine; and that in the hands of other surgeons (his experience having been limited to its application to syphilis) it had proved valuable in the treatment of scrofula, anemia, and in furunculoid tendencies, especially of epidemic form.

This combination has been employed by the writer, in common with several physicians of this city, in various forms of cachexy from a period immediately after the publication of the formula in this country to the present, and we have often found the happiest results from its administration to patients who seemed to require tonic and alterative treatment.

The fact that the iron compound remains persistently in the state of protosalt, and that the fluid never becomes inky by action of the tannic principles of the bark, shows that there is here something more than a mere mixture of ingredients—that there is some new combination of iodine, the cinchona

alkaloids, oxide of iron, and the tannic principles—for the same materials act differently when used singly or when otherwise combined.

The dose of this medicine is from one to three fluid drachms thrice daily.

Some of our readers may be disappointed because we have not reported the proceedings of the New York Academy of Medicine in relation to the death of Mr. Whitney, asserted to have been caused by the introduction of an instrument into, and somewhere behind and below, his mouth, by a gentleman whose name is somewhat familiar to the profession in connection with the local treatment of throat and pulmonary diseases.

Our reasons for reserving an expression of opinion on the merits of the charge are, that we have noticed conflicting statements in relation to the case, and that we know personally some of the gentlemen whose names are associated with it, the value of whose judgment does not require commendation from us, and whose exalted position before the profession, should preclude a suspicion of their want of integrity.

Upon the abstract question of the propriety or feasibility of injecting cavities of the lungs through the bronchi, we might pronounce unhesitatingly, but the question involved in this discussion is one of fact, and until the evidence of both parties is before us, from an authentic source, we will not even form an opinion. This evidence we will receive if possible, but should we ascertain that, after all, this controversy is one of a personal character, and not involving points of practical interest or scientific enquiry, "we'll none of it;" for we do not propose to aim as much at the gratification of our reader's taste, as at the improvement of his mind.

We insert in this number the proceedings of the "College of Physicians and Surgeons of Louisville," at the eighth regular meeting after their second organization, and will from this date publish such of their proceedings as possess sufficient practical value to render them of interest to our readers.

It is proper at this time to extend an invitation in behalf of the President and members of this Society to all physicians

visiting the city during their weekly sessions, to be present and participate in the discussion of such professional topics as may engage the attention of the College. We assure our readers that these meetings are generally both agreeable and profitable. They will, however, bear in mind that the discussions and opinions of members are almost entirely unpremeditated, and as abstracts only of these opinions can be published they must expect an occasional inaccuracy in matter or expression.

The meetings are held every Tuesday, at 7 P. M., at the Society rooms on the west side of Third street, between Jefferson and Green; and a janitor is always in attendance to announce visitors.

We have been favored with a copy of "A Treatise on Human Physiology, by John C. Dalton, Jr., M. D.," published by Blanchard & Lea, Philadelphia, and illustrated by 254 engravings.

The dress and style of this work are in the highest degree creditable to the publishers. The illustrations are beautifully graphic, and we expect to derive much pleasure and profit from its perusal. Upon its merits as a scientific work, we can not now pronounce judgment, although we confess to a degree of prepossession in its favor from the hasty glance which we have been enabled to take at its contents. In our reviews of books or remarks on current medical literature, our readers may rely upon receiving an independent expression of opinion. We may frequently err, but our errors will be of judgment, and not of prejudice on the one hand, or of partiality on the other; and authors and publishers may expect us to be always equally ready to condemn or approve as our judgment may dictate.

Correction.—Some errors which were marked for correction on the first proof of our last issue, escaped correction in the revision. Thus in the article of Professor Breckinridge, on the 35th page, first line, instead of "Black Drop, ℥1," it should be, "℥6;" and instead of "or of Morphia, grs. 2," it should be, "*and* of Morphia, grs. 2;" and at the twelfth line, instead of, "℥2," it should be, "℥2;" and also instead of "Ammonia Acetat: ℥½," it should be, "ʒ½." We regret the

occurrence of these errors, but have compositors now, who will not require other space for corrections than that upon the margins. Messrs. Hanna & Co. are exceedingly particular and careful, and afford us every facility for making our journal what we design it shall be—typographically accurate.

It is not our fault that no reports of the proceedings of the State Medical Society appear in our present number. We only await the revision of some of them by their authors. We will publish in our next one or two numbers, that of Dr. S. B. Richardson on Hernia, which we conceive to be one of the most, if not the most, valuable of papers on the history of that disease which has ever been published in this or any other country. In addition to the statistical information imparted in his report, he gives the outline of an original operation for the radical cure of umbilical hernia, which will command the attention of surgeons, and in connection with that form of the disease we may perhaps give our own method of treatment, which is not original, but which we have proved to be efficient in numerous cases, not only of infantile hernia but of ventral hernia, in horses as well as man.

Those of our cotemporaries who have been pleased to greet our coming, with a kindly welcome and pleasant words, are gratefully remembered. A stranger naturally appreciates the civilities of old inhabitants, and a pleasant smile beaming on his first coming makes an impress deeper and more pleasurable than long continued subsequent attentions; whilst a cold reception or neglect leaves a spot on the page of memory which is not easily obliterated.

Several publications have been received, which we will notice in our next number. Correspondents must not be disappointed because they do not see their communications immediately in print. We will gladly publish such as we may deem of practical importance with as little delay as possible.

Our readers are referred to the extracts from Dr. Seymour's address (page 93 matter), which should not be merely glanced at, but "marked, learned, and inwardly digested."

Selected Articles.

EXTRACTS FROM AN ADDRESS TO THE GRADUATING CLASS OF CASTLETON MEDICAL COLLEGE.

By WILLIAM P. SEYMOUR, M. D.

But it is as a surgeon to the uniformed militia—those brave defenders of our common country—that you will become most widely known, and win your most brilliant honors. Who among us fails to recollect the boyish admiration with which we gathered around the mounted staff on the day of the general muster? or the eagerness with which we listened for every word which fell from the lips of those doughty soldiers? or the overpowering sentiments of respect we felt for all their belongings—a respect even transferred to the ragged boy, who bestrode the fiery steed, resigned to his temporary keeping when the aforesaid lips were dry? 'Tis true age has somewhat tempered our boyish admiration. Our hair has been so often cut and brushed, and our measures so often taken by the same hands which grasped the glittering weapons once so dazzling to our eyes, that we have grown familiar, and thoughts of the friendly shears and warm-breasted goose drive out the visions of the tented field which rose on our younger days; but the most careless observation assures us that very many, if they have grown older, are at least no wiser than when blessed with fewer years. Aspire, then, to the post of regimental surgeon. Here and there a quiet spectator may compare you to the thronging columns of empty muskets behind you, and recognize the fact that analagous conditions render you the only really dangerous element in the imposing spectacle; but content yourself with the conviction that those eyes, at least, which are bent upon you from the areas and overhanging attics, while they invest your plumed companions with the heroism of Ney, the dashing gallantry of Murat, and the terrible energy of the great Napoleon, will, by a parity of reasoning, regard you somewhat in the light of a Hennan, a Guthrie, and a Baron Larrey. * * * * * *

But the greatest value of surgery to the "doctor" is the multiplicity of opportunities it affords for the exercise of his most brilliant talent—"*blowing*." "In Chili," says Zimmerman, "the physicians blow around the beds of their patients to

drive away diseases; and as the people in that country believe that the physic consists wholly in the wind, their doctors would take it very ill of any person who should attempt to make the method of cure more difficult; *they think they know enough when they know how to blow.*" Our doctors, compared with those of Chili, are greater knaves and less fools; they do not believe in *curing* patients by "blowing," although they may be possessed of no other mode, but they are well aware of the value of this intellectual exercise in *getting them.* There are many ways of "blowing" which time will not permit to enumerate, but which will be easily learned by him who relies upon the arts of the "doctor" instead of the science of the "physician" for professional success. Many are so stale that none but the most impudent have the face to practice them. All the little tricks which are designed to convey the idea of having an extensive practice are of this character; such as writing a number of messages on one's office slate; being regularly called out of public assemblages by appointment; and driving furiously past houses of public worship, just as the congregations are going to or from service. But it is in the line of Falstaff that true genius is manifested in this indispensable accomplishment. The number of cases of any prevailing disease which a "blowing doctor" has under treatment, or has treated, is truly wonderful, and if you doubt these "men in buckram," he is ever ready to furnish some positive evidence of the veracity of the narrative. The character of his surgical adventures is particularly marvellous, and though their falsehood is "open, palpable," and the occasion of secret mirth to the "Bardolphs" in his confidence, they are readily accepted as true by those not yet advised of the imaginative powers of the swaggering hero. Surgery has the great advantage, moreover, of bringing the aid of the daily press to the blowing powers of the doctor. Men will sicken and die, while no notice is taken of the fact beyond the announcement of the funeral; but every little accident is greedily caught up and made the basis of a sensation article, with which to stimulate the vulgar taste which loves to "sup on horrors." Friendly relations with the item-gatherer will secure the insertion with every spicy paragraph of this character of the advertisement that "Dr. Blower was called;" the printer's devil may laugh, as he is generally sensible enough to do, over the daily repetition of the familiar phrase, for he understands the full value of the announcement; but the derisive sounds will be lost in the heavy clang of the power-press, which thunders it in the ears of thousands whose highest standard of authority is, "the papers said so." Cultivate, then, the friendship of the item-gatherer; the labors of this literary scavenger will render

fruitful a soil too thin and poor to pay the expense of cultivation when not enriched by his contributions. * * * * *

As a physician, your duties to those stricken with disease, will not cease with the conviction of its impending mortality; it will be your duty to alleviate suffering and make the act of dying as painless as possible; much may be done in this way to lessen the severity of the grievous blow to the hearts of surviving friends as well as to the departing patient.

You will rarely, perhaps never, witness those fearful mental tortures which are said by poets to often attend on the last moments of the dying; by a merciful arrangement the gradual rupture of the invisible bonds which connect the escaping spirit with the perishing body, most always destroys the earthly sympathies which before were manifest, and the tired sufferer generally longs to go and be at rest. Whatever questions of an anxious character may arise are usually submitted to the spiritual adviser. If ever the personal affection and trusting confidence, which it is the highest recompense of the physician to experience from his patients, should prompt an imploring appeal to you for guidance in this last extremity, you will, if a Christian, have no delicacy as to your proper course; if not, you will still unhesitatingly advise a calm submission to the will of the great Creator, with a humble reliance on his unfailing mercy.

Whether Christian or not, you will find a moral over which you will do well to ponder in the recorded life of one who, as a member of our profession, we assume was one of the wisest of the disciples. We read of no long prayers, or persistent questionings, or obtrusive services to his revered master; we only know that "he had perfect understanding of all things from the beginning," and his life, and acts, and epitaph are all recorded in the simple phrase, "*the beloved physician.*"

May we not assume that *his altars* were erected by the cradle of infancy, the couch of prostrate manhood, of uncomplaining woman, and feeble old age, as, in his wanderings from Galilee to the Mount of Olives, he followed Christ.

When both Jew and Gentile go up together to the New Jerusalem, in that last great day, to celebrate the final passover, will not the young man, the old man, and the maiden, the lame, the halt, and the blind, who come from that hallowed land of Judea, bear in their grateful hearts an unquestioned testimony of his faithfulness?

Mortality of Philadelphia in 1858.—The total mortality in Philadelphia during the past year was 10,694, being 1 in 56 of the population.

Prolapsus of the Rectum during Lithotomy.—The occurrence of complete prolapsus of the lower bowel during the performance of lithotomy sometimes greatly embarrasses a surgeon, unless he has previously encountered such a complication, or is prepared for any emergency which may arise. The sudden protrusion of a long substance, such as an inverted rectum, has, as Mr. Fergusson stated, given much trouble in the hands of some surgeons when performing the above operation. Although we have now seen this complication present several times, we do not remember such a severe example of it as was submitted to operation at King's College Hospital on the 30th of October, by the above gentleman. A child, three years of age, had suffered from symptoms of stone since birth —probably it may have been congenital—and its effects had greatly undermined the patient's health, and produced much emaciation and debility. While under the influence of chloroform, given by Dr. Anstey, lithotomy was performed, and when the stone was extracted, the bowel prolapsed, and formed a tumor fully four inches long. This, however, did not prevent Mr. Fergusson getting away the stone, and reducing the bowel. The stone, much larger than a pigeon's egg, was a mulberry calculus, coated with a thin layer of the phosphates. Very little blood indeed was lost. The presence of such a body would very naturally irritate a part in such close proximity as the rectum, and produced prolapsus of that organ. Its removal, has completely obviated that inconvenience, and the child is advancing towards a good recovery.—*Lancet*, Nov. 13, 1858.

Erysipelas Prevailing in the Paris Hospitals.—In the hospitals generally, erysipelas has been prevailing to an unusual extent for the last ten days; indeed, in some the surgeons have, in consequence, been under the necessity of delaying operations, except in cases of a pressing description. It is quite possible that the extremely sudden changes of weather which have been experienced of late may have something to do with the appearance of this most unwelcome visitor. In the limited space of twenty-four hours we have observed the temperature of the four seasons, while frost, fog, rain, and sunshine, have followed each other in rapid succession. Not only has the health of the hospitals been affected by these sudden transitions; their influence has also been perceptible "*en ville*," where coughs and sore throats seem to be the order of the day.—*Medical News and Library.*

Richard Bright, M. D., Physician Extraordinary to the Queen, died in London on the 16th December last, aged 70.

Semi-Monthly Medical News.

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REPORT ON STATISTICS OF HERNIA, WITH A NEW OPERATION FOR THE RADICAL CURE OF UMBILICAL HERNIA—ILLUSTRATED WITH A CASE.

By SAMUEL B. RICHARDSON, M. D., of Louisville, Ky.

As a Committee on "Statistics of Hernia," appointed by the Kentucky State Medical Society, I beg leave to submit the following report:

From the earliest records of medicine, there is abundant evidence that great importance has been attached to hernia. Its frequent occurrence among all classes—the *urgency* of its symptoms—the disabilities of body and mind which it entails—its not unfrequent fatal termination—indicate with some certainty, that this affection must have attracted serious attention from a very early period of our race, long anterior to the attainment of any but the rudest knowledge of human anatomy.

A recent, reliable, and, it may be added, classical authority on this subject, has written: "If there be any disorder which, from the frequency of its occurrence and from *the variety of forms* under which it is presented to the care of the surgeon, demands more than others his minute and attentive investigation in every part of its history and treatment, such assuredly is hernia."* And no medical man of ordinary observation will gainsay the truth and weight of this simple enunciation. Less than three and a half centuries have elapsed since the nature of hernia has been understood, and much less than that period has elapsed since its *true* anatomy and mechanism have been demonstrated, thanks be to the self-denying labors of the Coopers and Cloquets of this and immediately preceding generations. When "the priests were the doctors," and it was a crime to examine with the knife the structure of a dead human

* Lawrence on Hernia.

body, or to believe that our earth revolves—punishable by the inquisition, with death on the rack or gibbet—verily the *nature* of hernia could not be known. These were indeed the "days of darkness" on this and all kindred subjects. As the *nature* of the malady was unknown prior to the revelations of anatomy, so there could be no philosophic treatment, thereby beautifully and aptly illustrating the parallelism ever found to obtain between the *nature* and *treatment* of disease. The "Statistics of Hernia," in any thing like an *exact* sense, has no existence, and is a lamentable deficiency. It has not been embraced in any system of registration, so far as the record shows; which is the only method by which the desired information is attainable. Mr. Lawrence says: "Surgeons of great experience in the treatment of ruptures have estimated, that one-eighth, or one-sixteenth, of the human race are afflicted with this complaint, which affects indiscriminately persons of both sexes, of every age, condition, and mode of life;" but adds, "my readers will not rely upon these or any other statements—they appear to be manifestly exaggerated."* The same high authority says again: "Among those who are relieved by charitable institutions the proportion of the ruptured *varies so much* in different instances that we can draw no general conclusions." Of 10,792 dispensary patients in Edinburgh, 95 were furnished with trusses—*i. e.*, 1 in about 130. Of 3,712 persons received into the New Castle Infirmary, 132 had ruptures—or 1 in 28. Of 305 men, women, and children in the workhouse of Manchester, 20 were ruptured—or 1 in 15; and in 1,486 surgical out-patients in the same place, there were 192 ruptured—or nearly 1 in 8.† Of 7,027 women in the Salpetriere, 220 were ruptured—about 1 in 32. At the Bicetre, of 3,800 men, 1 in 18 was ruptured. At the Invalides, out of 2,500 or 2,600 men, 1 in about 29; and of 1,037 children at the Hopital de la Pitie, 21 were ruptured—or 1 in 50.‡ This is probably a larger proportion than is *generally* found in France.

As a further means of determining the number of young men of a particular class who are the subjects of hernia, refer-

* Treatise on Hernia. London edition. 1838.

† Morbid Anatomy of the Human Gullet. By Dr. Monro.

‡ M. Louis' Memoires de l'Acad. de Chir. Tom 5.

ence has been made to the number of rejections of recruits or conscripts into the military service in different military states. No similar observations have been made, so far as I am informed, in the United States.

A return of Dr. Versturme, Inspector-General of the German Legion, shows that, of 40,460 recruits examined between March, 1796, and December, 1810, 365 were rejected for ruptures—or 1 in 110. During the same time, 2,728 were invalided, of whom 316 were on account of ruptures—being between one-eighth and one-ninth of all that were invalids.*

Marshall, in his "Hints to Young Medical Officers," says of 12,835 recruits, inspected in Dublin from December, 1824, to December, 1827, 116 were rejected on account of being ruptured—or 1 in 110; laxity of the abdominal rings is assigned as a reason for rejecting 133 more.

Robert Knox, M.D., F. R. S. E., in his article entitled, "Observations on the Statistics of Hernia," in Edinburgh Medical and Surgical Journal, vol. xlvi., the main object of which is to show the *want of accuracy* in opinions which prevail among surgeons on the subject; and more especially to prove that the average per centage of *all* mankind who have hernia has been over-estimated, quotes as follows: "The French conscription for the years 1831–3 inclusive, amounted on the average to 286,429, of which 3,948 were exempted for hernia, being a ratio of 3 per cent. He says: "I believe hernia not to be uncommon amongst the real laboring and hard working classes, but in what ratio it is impossible to say; whilst, on the other hand, whole classes of society—those, viz., who do not labor, those who, whether rich or poor, live chiefly by the labor of others—are almost exempt from it. Of 86 persons of the poorer *non*-laboring classes of society, and who have died from *every* variety of disease, and were examined with scrupulous attention to this fact, there did not occur a single instance of hernia of any sort." He does not give his authority for this statement, but we presume they were observations taken at some mendicant establishment in Scotland. But as Dr. Knox, who has been a *medical officer* in the *British* service at "*the Cape*," and has written on "Hernia Statistics," may be regarded.

* Morbid Anatomy of the Human Gullet. By Dr. Monro.

as authority on the subject, we make a further quotation, which is in rather singular contrast with the above.

"The inhabitants of the Cape *never labor at all*, at least, so it appeared to me, in respect to the farmers on the northern and eastern frontier of the colony; and Mr. Barlow has recorded the *indolence* of the colonists as incredible and *extreme*. In this respect I presume they are like other men; there being *no* necessity for labor, they naturally *avoid* it. Yet they are said to be much subject to hernia. That I may not fall into the error of speaking and writing from no positive data, I had better mention the circumstance that first led me to notice the fact; and if correct (and of it I have little doubt), it proves that, there is a *healthy*, well-formed race, who *never* labor, and yet *are peculiarly subject* to hernia. I acted for some months as surgeon to a corps of yeomanry, perhaps about 900 strong, and composed almost exclusively of Dutch farmers and their sons, and of *all* ages. One of those farmers, however, a *mulatto*, claimed exemption from active service on account of a large and pendulous tumor growing from the inside of the thigh, and on examining this tumor, I also remarked an inguinal hernia. My report to the commanding officer, an affluent Dutchman, was, that I thought this man should not proceed with us, on two grounds: first, by reason of the tumor; and, secondly, on account of a hernia for which he had no truss. The commanding officer cautioned me not to sanction the hernia as a cause, else we might have to discharge at least a *third* of the men next day, for he verily believed that *one-third* of the corps were subject to that troublesome accident, to which he *himself* was also liable. Allowing the statement to be a little exaggerated, yet it argues a frequency of hernia in a race of men enjoying *the greatest ease and comfort* almost without a parallel. They are greatly disposed to corpulency, and are much on horseback, to which may be attributed the complaint which is *usually* ascribed to *labor*."

The conclusion to which Dr. Knox arrives from the most reliable data known to him, as he avers, is that not more than *one* and *one-third* to *one-quarter* per cent. of all ages of the inhabitants of the British isles, Germany, and France, are the subjects of hernia. It must be remembered that *all* his data are derived from the reports of conscription and recruits for

the armies (young men), and of *Parisian* hospitals for the special accommodation and *permanent* residence of old men, old women, young men, and invalided men (Hotel des Invalides) respectively, amounting in all to some 15,000 souls. With all the imperfections of the statistics upon the question of the *proportion* of our race, in civilized life at least, who have hernia, we can not agree with Dr. K.'s conclusions, and must suppose that his estimate is much below the reality in all countries. Mr. Turnbull, surgeon to the "London Rupture Society,"* asserts upon the authority of most general and diligent inquiries throughout the kingdom that the proportion of ruptures to the whole population is 1 in 15, including persons of both sexes and *all* ages. M. Juville's conclusions, from his opportunities for observation as a truss maker in Paris upon a very extended scale, are, that about *one-thirtieth* of the population in Germany and the north of Europe, *one-fifteenth* in Italy and Spain, and *one-twentieth* in France and England, are the subjects of Hernia.† Assuming these figures as approximative, this disparity of the proportion of the population affected with hernia in the principal states of Europe, from the north to the *extreme* south, is probably referable to the operation of some *general* cause or causes—as climate, topography, habits of the population, &c., &c. The following statistics are taken from the French of M. Vidal‡ (de Casis), embodying the recent investigations and conclusions of M. Malgaigne. It is apparent after what has already been stated (upon the causes of hernia), that the circumstances favorable to the production of it are very frequent and numerous, and that this infirmity is *very common*—its frequency is varied by age, sex, and profession. M. Malgaigne§ has investigated the influences of these various circumstances in its production, in the statistical studies in which he has been engaged at the *Central Bureau* upon many *thousands* of subjects; the following are his conclusions: In France every twentieth individual is the subject of hernia—or 2 in 41; and that number is divided between the sexes as follows, viz., men a thirteenth, women 62 in 100. The condition

* Turnbull's Manual, &c. † Traite des Baird. Hern.

‡ Aug. (de Casis) Traite de Path. Externe et de Med. Operat. Tom 4. Paris. 1846.

§ Recherches sur la Frequence des Hernies. Dans Annales d'Hygiene et de Med. Legale. Paris. 1840. Tom 24, p. 5, et suivants.

of the umbilical ring at birth—the frequent persistence of the canal of Nuck, and of the *primary* communication between the vaginal tunic and the peritoneum at that period, render the infirmity *frequent* during the *first* year of life, so that 1 in 21 is thus affected at that age. These predisposing causes cease with age, so that the proportion of hernial subjects diminishes as rapidly during the following years. At thirteen years of age we have but 1 case of hernia among 77 children. From thirteen to twenty years of age among *males*, the cases become numerous—very few among young girls. Is this difference between the sexes in this regard due to the differences in the plays and exercises peculiar to each of that age? At the age of twenty to twenty-one years, there exists about 1 case of hernia to 32 men, proven by the results of the operation of the recruiting boards. From the twentieth to the thirtieth year, hernia cases *increase* very much among *females*, attributable no doubt to repeated pregnancies distending the walls of the abdomen—separating the recti abdomini muscles—diminishing the strength of the linea alba and dilating the umbilical ring and the crural openings. At the twenty-eighth year of age, one-twenty-first part of the population have hernia; from the thirtieth to the thirty-fifth year, one-seventeenth; one-ninth from thirty-five to forty years; one-sixth at fifty years; one-fourth from sixty to seventy years; one-third from seventy to seventy-five years of age. After that the proportional number of hernial cases diminishes by its *abridging the duration of life.* Thus from seventy-five to eighty years, only 1 in 4 have hernia; from eighty to eighty-five years, only one-fourteenth; from eighty-three to eighty-six years, one-twenty-third; and from eighty-six to one hundred years of age, only one-fifty-sixth are found to be the subjects of hernia. The rich, or those in *easy* circumstances, are much *less* subject to the infirmity than the poor and laboring classes. Hernia more frequently exists among those who labor in the *erect* than in the sitting posture; tall persons are more subject to it than those of low stature."

No attempt, it is believed, has been made in any portion of the United States to collect statistical information upon a scale which enables us to arrive at even an approximative estimate of the proportion of its inhabitants who are the subjects of hernia.

That it is rather a *common* infirmity is certain. As a general thing our population are *laborious*, mostly engaged in agriculture, no privileged classes, and but few mendicants compared with European states, with nearly every diversity of climate, mountain and valley of the latter, it may be inferred that the per centage of hernial cases in this country would not fall much short of the estimates of French and English observers.

The *relative proportion* of the *different species* of hernia, as it is found in both sexes and at all ages, is much more reliable. The following tables are given in detail because of their value and convenience for reference. They are extracted from the "City of London Hernia and Truss Society's" register of the patients relieved by it, embracing a period of twenty-eight years, terminating 1835.* This society was organized in 1807. In a grand total of 83,584 patients examined, 67,798 were males, and 15,786 were females—a little over 4 1-7 males to 1 female.

MALES.	FEMALES.			
14,006	511	left inguinal.	39,419 inguinal.	45,629 single.
24,316	586	right inguinal.		
278	2,255	left femoral.	6,210 femoral.	
421	3,256	right femoral.		
24,966	286	double inguinal.		27,029 double.
169	1,608	double femoral.		
664	2,775	umbilical.		4,063
209	415	ventral.		
1	3	peritoneal.		4
1	4	obturator.		5
26	46	have undergone operations.		72
2,289	1,401	with umbilical and inguinal hernia *have been cured.*		3,690
446	243	with prolapsus ani.		689
	2,196	with prolapsus uteri.		2,392
	37	with prolapsus vaginæ.		
	159	with prolapsus vesicæ.		
6	5	with varix of the abdominal veins.		11
67,798	15,786			83,584

In addition, the following varieties in the situation of this malady have been observed, viz., in 801 males:

184 had *left* inguinal and *right* femoral hernia.
82 had *left* inguinal and *left* femoral hernia.
13 had *left* inguinal and *double* femoral hernia.
10 had *left* inguinal and ventral hernia.

* See Turnbull's Manual.

13 had left inguinal and umbilical hernia.
3 had left inguinal hernia and prolapsus ani.
3 had left inguinal, umbilical, and ventral hernia.
135 had right inguinal and left femoral hernia.
27 had right inguinal and right femoral hernia.
24 had right inguinal and *double* femoral hernia.
16 had right inguinal and ventral hernia.
26 had right inguinal and umbilical hernia.
7 had right inguinal hernia and prolapsus ani.
1 had right inguinal, umbilical, and ventral hernia.
87 had double inguinal and right femoral hernia.
54 had double inguinal and *left* femoral hernia.
27 had double inguinal and double femoral hernia.
1 had double inguinal and double femoral hernia outside of the femoral vessels.
12 had double inguinal and ventral hernia.
1 had double inguinal and double ventral hernia.
48 had double inguinal and umbilical hernia.
18 had double inguinal hernia and prolapsus ani.
2 had double inguinal, umbilical, and ventral hernia.
1 had left femoral and umbilical hernia.
1 had *right* femoral and ventral hernia.
1 had right femoral and umbilical hernia.
1 had right femoral hernia outside of the femoral vessels.

801

In 366 *female* cases—

13 had left inguinal and left femoral hernia.
40 had left inguinal and right femoral hernia.
1 had left inguinal and double femoral hernia.
2 had left inguinal and umbilical hernia.
6 had left inguinal hernia and prolapsus uteri.
1 had left inguinal hernia and prolapsus ani.
20 had right inguinal and left femoral hernia.
5 had right inguinal and right femoral hernia.
1 had right inguinal and double femoral hernia.
9 had right inguinal and umbilical hernia.
3 had right inguinal and ventral hernia.
3 had right inguinal hernia and prolapsus uteri.
1 had double inguinal and right femoral hernia.
8 had double inguinal and umbilical hernia.
5 had double inguinal and ventral hernia.
1 had double inguinal hernia and prolapsus uteri.
28 had single femoral and umbilical hernia.
10 had single femoral and ventral hernia.
1 had left femoral and double ventral hernia on right side.
1 had left femoral and right obturator hernia.
3 had left femoral hernia on the outside of the femoral vessels.
14 had single femoral hernia and prolapsus uteri.
2 had right femoral hernia on the outside of the femoral vessels.

1 had right femoral hernia on the outside and inside of the femoral vessels.
2 had right femoral hernia, prolapsus uteri, and prolapsus vesicæ.
12 had double femoral and umbilical hernia.
3 had double femoral and large ventral hernia.
8 had double femoral hernia and prolapsus uteri.
2 had double femoral hernia and prolapsus ani.
22 had umbilical and ventral hernia.
5 had umbilical hernia and prolapsus uteri.
1 had umbilical hernia, prolapsus uteri, and prolapsus vesicæ.
1 had ventral hernia and prolapsus uteri.
5 had prolapsus uteri and prolapsus ani.
109 had prolapsus uteri and prolapsus vesicæ.
8 had prolapsus uteri and prolapsus vaginæ.
10 had prolapsus uteri, prolapsus vesicæ, and prolapsus vaginæ.

366

5,448 patients had congenital hernia.
7,299 patients under 10 years of age were relieved with trusses.
4,551 patients between 10 and 20 years of age.
8,715 " " 20 " 30 " "
13,614 " " 30 " 40 " "
1,562 " " 40 " 50 " "
14,139 " " 50 " 60 " "
9,761 " " 60 " 70 " "
3,866 " " 70 " 80 " "
442 " " 80 " 90 " "
23 " " 90 " 100 " "

78,067

An elaborate analysis of the foregoing statistical tables is not designed; reference will be made, however, to a few of the most important facts deducible therefrom. Of 45,629 cases of *single* inguinal and single femoral hernia, in both sexes, 6,210 were femoral or rising, $7\frac{1}{4}$ of the former to 1 of the latter; and of the 6,210 cases of *femoral* hernia, only 699 were males—or nearly 9 females to 1 male. The great preponderance of *inguinal* hernia in *males*, and of *femoral* hernia in *females*, is readily explained by the more *persistent* as well as *frequent* operation of the well known causes producing it in the former, and of the modification of anatomical conformation in females, favoring the more frequent development of the latter among them.

The greater frequency of hernia on the *right* side of the abdomen compared with the *left* side, so generally observed, is abundantly confirmed. Thus of 38,419 cases of inguinal hernia in *both* sexes and on both sides, 14,517 were on the *left*

side, and 24,902 were found on the *right* side—nearly *two* of the latter to one of the former. Of this large number of cases of inguinal hernia, only 1,097 were females. Mr. John R. Erringer, surgeon's instrument maker of this city, and who probably makes more trusses than any other maker in the south-western States for the last fifteen years, informs me that he invariably furnishes trusses (by the dozen or gross) in the proportion of *two* for the right side to *one* for the left, and that they are retailed in that proportion at the various depots throughout the city and country. Occasionally there is a *small* excess in a *large* number of those for the right side. This of course embraces both sexes and all ages. I may add, that Mr. E. has applied *himself* at his manufactory annually a very considerable number of trusses for a number of years past, and as the result of his observations and inquiries on the subject, concludes that not less than 1 in 15 to 20 of the *entire* population are the subjects of hernia. This of course is conjectural to some extent, although based upon the observance of a large number of hernial cases. Since the above was written, I have received a note from Mr. E. confirmatory of his verbal statements on this subject, which is not without value in a statistical point of view. See appendix.

The following table, based upon the personal examination of 457 cases of hernia, by M. Jules Cloquet,* is to same effect. The preponderance is not so largely in favor of the right side, as the more extended observations already given. Of the 457 cases of hernia referred to, 307 occurred in the male and 150 in the female sex; 246 on the right, 187 on the left side, and 24 on the middle line of the abdomen. The number of the different species were as follows, viz.:

MALES	FEMALES.			
94	11 right external inguinal.	203 external.	289 inguinal.	
79	19 left external inguinal.			
39	8 right internal inguinal.	86 internal.		
35	4 left internal inguinal.			
33	54 right femoral hernia.	134 femoral or crural.		
22	25 left femoral hernia.			
3	21 umbilical and linea alba.—Total 24.			
2	5 right obturator.	10 obturator hernia.		
	3 left obturator.			

[NOTE.—The words internal and external, as employed by M. C. in the above table, have reference to the point of her-

* Recherches sur les Causes et l'Anatomie des Hernies Abdominales.

nial protrusion in its relations to the *ordinary* course of the epigastric artery, *internal* or *external* to it. Ventral, or ventro-inguinal, and inguinal, as used by the English surgeons, are synonymous with *external* and *internal* inguinal. Why this marked preponderance of hernial protrusions on the *right* side? Some diversity of opinion exists on the subject. Dr. Knox, already quoted, thinks he has made an anatomical discovery, and attributes it to a *slightly greater breadth of the osseous pelvis* on the *right* side. This is a *novel* suggestion. The most plausible theory proposed, and perhaps the correct interpretation of the fact, is that of M. Jules Cloquet,* who attributes it to greater muscular action or efforts made with the *right half* of the body in the ordinary duties of life. This explanation will be better understood by the following extract taken from the original French: "In all efforts made with the *right* superior extremity," says this surgeon, "the trunk is curved or bent to the left, and in *that* position the contractions of the diaphragm press the viscera of the abdomen towards the right inguinal and crural rings." The editor of "Le Gazette des Hopitaux" adds: "If this be the *true* reason of this difference, hernia should be found most frequent on the *left* side among persons who are *left* handed; and such is the fact."]

Recurring again to the first table of the "London Rupture Society," it is found that 72 out of 83,584 hernial patients had undergone *operations* (for supposed strangulations), and it is inferable that they were *operated* upon prior to their being seen at the Society's office. Again, 2,289 males and 1,401 females—3,690 subjects of umbilical and inguinal hernia—had been *cured*. Reference will be again made to these facts further on. Not one case of *cure* of *femoral* hernia, in either sex or of any age, is mentioned. The very large proportion of *double* hernia in both sexes—being 27,029 to 45,729 *single* ones—is noticeable; more than *one* of the former to *two* of the latter. This is probably to be referred to the fact that most of the cases embraced in the tables of this charity were from among the strictly laboring population of the great metropolis of England, who, it is well known, often carry *heavy* burdens, for *long* distances, on their shoulders and heads.

* Recherches sur les Causes et l'Anatomie des Hernies Abdominales, pp. 10–13, et Gazette des Hopitaux.

(To be continued.)

TWO CASES OF CHOREA.

By J. M. BRANNOCK, M.D., McLemoresville, Carroll Co., Tenn.

CASE 1.—Chorea, complicated with abscess over the spine.

The patient was a little negro girl, 10 years of age, belonging to Mr. P. J——. The disease was of recent origin, and the symptoms strongly marked. She had scarcely any control over the muscles of voluntary motion. Her speech was quite hesitating, and her gait uncertain and staggering. As is usually the case, she was always decidedly worse whenever she was conscious that any one was observing her. Her general health was good, with the exception that her bowels were costive.

She was ordered to take the cold shower bath every morning, an aloetic purgative every night, and 20 grs. of carbonate of iron three times daily. On this treatment she improved rapidly for about two weeks, and seemed almost well, when she commenced complaining of pain in her back. I found her with great tenderness on pressure about the junction of the dorsal and lumbar vertebræ, at which point also the slightest movement of the body caused the most excruciating pain—so much so, that she dreaded nothing so much as the least motion. She was unable to sit or stand, the upright position, even for a few seconds, causing her intense suffering. Her mother was disposed to attribute this condition to a fall which she received while trying to walk about a day or two before.

A blister was applied over the seat of the pain, and the bowels ordered to be kept open. In a few days, on visiting her, I found her free from pain, but upon examination, a large abscess was observed occupying the place where the pain had been situated. I evacuated the matter (about 16 ounces,) introduced a tent to keep the orifice from closing, and directed a poultice to be applied. She was now put upon the use of iodide of iron, with the compound syrup of sarsaparilla. In a few weeks the abscess had ceased discharging, the orifice had healed, and the child's health seemed perfectly restored in every respect.

Could the formation of matter about the spine have had any agency in producing the Chorea, or was the abscess merely an accidental complication?

Case 2.—Chorea occurring during pregnancy, and complicated with Hysterical Convulsions.

Mrs. L——, aged 20 years, married eight months, and about six months advanced in pregnancy, came under my care in March last. Some weeks before I saw her, her husband noticed her having occasionally singular movements with her hands and head. Being unable to account for such symptoms, and attributing them to something unnatural connected with her pregnancy, she became melancholy. As the involuntary movements increased, so did her distress of mind. She was of a remarkably hysterical family. At the time I saw her she presented the usual symptoms of an attack of chorea of more than ordinary severity. Locomotion was suspended—the involuntary motions violent—the face drawn into all sorts of grimaces—the tongue protruded with great difficulty after repeated efforts, and suddenly retracted—speech hesitating and difficult. She had also the ordinary symptoms of hysteria in a marked degree, aggravated, frequently, into violent convulsions. The sight of her mother weeping, was sufficient at any time to bring on, immediately, a severe paroxysm.

She was ordered the cold towel bath every morning, to keep the bowels freely open, and to take, thrice daily, a drachm of the saturated tincture of cimicifuga, with a drachm of powdered valerian. Every thing calculated to excite depressing emotions to be carefully guarded against, and a cheerful frame of mind promoted. In a week she was considerably better; but the improvement not being so rapid as was desirable, the cimicifuga was discontinued, and a pill containing 2 grains of sulphate of zinc was given three times a day in its stead. The other treatment was continued. In a month she was discharged cured. She continued, however, to have occasional *slight* returns of choreic symptoms until after her confinement; since which time she has enjoyed excellent health in every respect.

[FROM OUR INDIANAPOLIS CORRESPONDENT.]

Messrs. Editors:

I was much pleased with the first number of the News, and I was particularly pleased with the declaration in your leading editorial, that "communications, or papers, written for the

benefit of the writer, rather than the reader, would be excluded." The fact is, there has been too much of that kind of writing, too much self-glorification, contained in many of our medical journals: indeed, an eminent physician remarked to me not long since, that it was difficult to believe more than one-half he read, of such productions; and I have in my possession a report, published in the transactions of one of our State Medical Societies, of a wonderful surgical operation, the performance of which is anatomically impossible. Such trifling things as arteries and veins never seem to have entered the mind of the writer, he undoubtedly wrote for his own benefit, not the reader's. There is some satisfaction, I admit, in knowing who the author is of what you read, yet ignorance of such fact does not diminish the value of an article in the least, while the probability is, in many instances, there would be less concealment of the truth did the author's name not appear; in other words, there would be less inducement to *gas*—less desire for hobby-riding.

Speaking of hobbies—specialties some would say—there are two which I conceive have been ridden almost to death (at any rate, some unfortunate patients have been ridden quite that far), I mean lung-burning and womb-burning: riding into the windpipe, on the one hand; and riding (the hobby, of course) into the vagina, on the other. Just see what a peck of trouble Horace Green is in. The New York papers are full of it. The New York Academy of Medicine is fuller. In the practice of his specialty, a gentleman by the name of Whitney came under his care, who died very suddenly after he had been *probanged*. Now, according to Green's own statement, made before the Academy of Medicine, his patient had tubercles in the upper lobe of the left lung; there was tubercular softening there, and the larynx, glottis, and epiglottis were much diseased. The treatment consisted of applications of a strong solution of nitrate of silver to the larynx and epiglottis, with the sponge probang and injections of the same into the left bronchus, for the benefit of the diseased upper lobe; while internally a mixture consisting of the iodide of potash, proto-iodide of mercury, and syrup of sarsaparilla was given. The patient died; and a post-mortem examination was made, the venerable Dr. Mott assisting in it. Strange to relate, not a

single tubercle was found, and the examiners assert that they have never seen a larynx and trachea more natural and healthy. Just at the commencement of the bronchial ramifications, on the left side, a cavity the size of a walnut was found, and an acute abscess existed on the left side of the larynx. Whether the applications of Dr. Green caused these troubles, as was broadly hinted before the Academy, or not, and whether the emphysema resulted from an injury done by the probang, or not, I will not discuss at present; but I desire to enter my earnest protest against the treatment pursued, admitting the diagnosis to have been correct. What can be more senseless than to administer mercury to a consumptive patient? Why give the proto-iodide under any circumstances in a mixture containing the iodide of potash? Would not the deuto-iodide, an infinitely more powerful preparation, be formed? Let me tell you what a Kentucky physician would rely upon in such a case: Bourbon county whisky, cod liver oil, plenty of good beef, vigorous exercise, and cleanliness. If they will not cure, nothing will. To inject a solution of the nitrate of silver into the left bronchus, and trust that it will find its way *up* into a tuberculous cavity, is worse than nonsense.

A word now about this womb-burning and I am done. That it may occasionally do good is possible; that it often does harm is equally possible. There are some who are so infatuated with the speculum, that it must be used upon every woman to whom they are called, no matter what the disease may be. I was told of an instance, which occurred not long ago, in a distant city, where an innocent womb was cauterized almost daily, until the patient died. The husband not being satisfied, had a post-mortem examination made, when, instead of a diseased womb, cancer of the colon and perforation of the bowel were found. Another instance was told me, where, after repeated and vigorous use of the caustic, a hole was burned into the rectum, and the patient died a miserable death. The doctor said it was eaten through by a cancer, more likely by the caustic. In what I have said, I do not desire to reflect in the least upon many competent gentlemen who give attention to specialties. My only desire is to condemn ignorance and dishonesty. Respectfully,

P. Squills.

PROCEEDINGS OF THE COLLEGE OF PHYSICIANS AND SURGEONS, OF LOUISVILLE.

Reported by S. M. BEMISS, M.D., Secretary.

NINTH MEETING, TUESDAY, NOV. 16, 1858.

On motion, the subject of last meeting was taken up for further discussion.

Dr. Bayless read from the July number of the British and Foreign Medico-Chirurgical Review, extracts of an article which in his opinion set forth the true state of the blood-letting controversy. After having summed together and considered the statistics of many cases subjected to treatment by blood-letting, and many where it had not been practiced, the writer had deduced the following conclusions:

"We may consider it to be proved that the non-bleeding treatment is much more successful than the indiscriminate employment of repeated venesections.

"One of the most important good effects of refraining from bleeding in pneumonia, claimed for it by Skoda, Dietl, and all its advocates, is the comparatively short convalescence of the patients and their rapid return to vigorous health.

"The result of non-bleeding in pneumonia in the Vienna Hospital in 1856, was very *unfavorable*, the deaths being 1 in 4 among the males, and 1 in 2.7 among the females. Only a few of these cases were bled. It is to be inferred that fewer of the asthenic cases, especially among the aged, died than would have been the case if they had been bled repeatedly, or even at all. When we deduct this favorable set-off, we are compelled to infer that the mortality was greater among the sthenic cases than it would have been under a discriminating plan of moderate early bleeding.

"While, then, the non-bleeding plan has a demonstrable advantage over that of indiscriminate and repeated bleedings, we maintain that the discriminating practice of moderate early bleeding, general or local, in cases of more or less sthenic pneumonia, and of refraining from it altogether in asthenic pneumonia, whether as regards the character of the disease or the constitution of the patient, is pressed upon us both by experience and science."

Dr. Bayless now wished to call the attention of members to one single point. It was urged by those who advocated its employment, that veratum viride was probably an adequate substitute for venesection. He wished to inquire in what manner it was that that drug was supposed to act beneficially in pneumonia and pleurisy, except by bringing down the heart's action so that less blood was forced through the lungs?

But did not blood-letting achieve this end more surely and more speedily?

Dr. W. B. Caldwell hoped the subject would be fully discussed. He was satisfied we were having more chronic disease as the sequence of acute attacks in consequence of the abandonment of the use of the lancet. He was sure we would have less neuralgia, less rheumatism of the cardiac structures, if we bled more than now. When he first entered the practice, it was customary to bleed every man who suffered violent pain, from whatever cause. He knew that his patients then recovered more speedily and completely than under the present rules of practice. He had lately begun to employ the lancet more frequently. Again, as to answering the question, "When is it necessary to practice blood-letting?" he presumed it could only be answered at the bedside; and as to the latter inquiry, "What is its substitute?" he was willing to say that he knew of no substitute.

Dr. M. Goldsmith stated, that he did not know that he was rightly understood at the last meeting. He had meant to say that there were two effects from bleeding: one immediate, as syncope, or lessening the heart's action; the other ultimate, as its influence upon the constitution of the blood itself. Of the former effect we could judge; of the latter we knew little or nothing, and its use in regard to its influence on the circulating fluid was empirical. In enteritis he wished to lessen the momentum of the circulation, for he believes the amount of exudates bears some proportion to force of circulation, and, consequently, he bled his patient until he lessened the heart's action. If gentlemen could satisfy him that veratrum viride would accomplish this end as safely and quickly, he would willingly accept it as a substitute for venesection; and he was willing to make the same declaration with regard to opium, which he considered more nearly answering this end than veratrum viride. He then considered that, without reference to the exact pathology, that is, the morbid anatomy, there are circumstances which require blood-letting, and which can not admit of substitute.

Dr. Wible remarked, that though he was an advocate for the lancet, there were evils following its use which should be borne in mind; thus if we bleed in pneumonia, there were two lesions: one of the blood, a vital fluid; one of the lungs, a vital organ. He prefers antimony as a substitute in pneumonia. He gives it in very small doses—say $\frac{1}{8}$ to 1-12, or even 1-16, of a grain—every half or quarter hour. However much he favored blood-letting, there were remote effects which should not be lost sight of. Tuberculosis, and probably all the evils of exhaustion, were to be enumerated in this list. He had

some years ago seen a patient of feeble, exsanguinated appearance, apply to an eminent surgeon for a prescription for a sore eye. He was ordered to be bled to syncope and put upon tartarized antimony. He did not doubt but that some benefit might have accrued to the diseased eye, but at what expense or sacrifice of constitutional vigor? What disastrous *sequelæ*, lasting probably through life, might not be expected to follow such practice.

Dr. Thomson does not think that bleeding will develope tuberculous diathesis. Knows one patient who has probably been bled seventy-five or one hundred times, and is still robust.

Dr. Miller said, it can not be doubted but that upon the whole subject of blood-letting a revolution in opinion has been going on both in this country and Europe. An era had lately passed, within the recollection of a large number of practitioners, when blood-letting was universally the rule. Dr. Rush, by his eloquence and enthusiasm, had done much to establish this rule. Thirty years ago it was probable that a physician could scarcely be found possibly in the Union who did not bleed in inflammatory affections; then typhoid fever, the bugbear to the use of the lancet at the present day, was unknown. He is willing to maintain, although he has no statistics to support the assertion, that practitioners of medicine were as successful thirty years ago as at present, probably more so. In 1822, a remarkably violent form of fever swept over Kentucky, in truth, over the West. It set in with violent shivering fits, followed by intense re-action. It was during this season as fatal in Louisville as epidemics of yellow fever in New Orleans or Charleston. He encountered this same type of fever in Barren county, where he was at that time practicing. He had kept notes of forty cases, in every one of which he had practiced venesection without even waiting for re-action, but often during the chill, with a struggling, laboring pulse and coldness of extremities. By opening the vein with a large orifice, and drawing one, two, and three pints of blood, he had often found during the flow of the blood that the laboring, over-burdened state of the pulse became relieved and the pulse beat regular, while the surface grew warm and equilibrium of circulation was restored. This does not differ much from the opinion of Dr. Mackintosh, who, it will be remembered, recommended the drawing of blood during the chill of any fever. Unless we repudiate this testimony, we must be satisfied with its truth. In congestive fever he fully believes in it. Dr. Mackintosh has never resorted to bleeding during the chill of intermittent fever, but would not fear to bleed if any attendant circumstance seemed to call for it. In exanthemata, where the diseased action is not expressed on the surface, nothing will

produce its external manifestation sooner than bleeding. Dr. Gordon never lost a patient in puerperal fever when he had the courage to bleed. With regard to blood-letting in acute inflammation of important internal organs, Dr. Miller said that he was by no means prepared to subscribe to the dogmas of Prof. Bennet, of Edinburgh. Whilst it may be true, according to the terms of one of his propositions, that "an inflammation once established can not be cut short, and that the only end of judicious medical practice is to conduct it to a favorable termination;" he must still maintain that it is in the power of bleeding to secure that object much more certainly and speedily than it can be secured by any other means. In the cases chosen by Dr. Bennet to illustrate his proposition — namely, pneumonia and pleurisy — granting that effusion must take place, is it no object worthy of our regard to restrain and limit the effusion? This it is surely in our power to do by the timely and copious abstraction of blood, and thereby we not only diminish the amount of exudation, but, at the same time, greatly mitigate the intensity of the inflammation and the sufferings of the patient. Where the inflammatory action is allowed to run its unbridled course, large effusion takes place in the air cells, smaller bronchi and parenchyma of the lungs in pneumonia, and into the pleural sac in pleurisy. It is consolatory to know that so serious a lesion is not beyond the remedial powers of nature, and it is interesting to study the successive steps by which the exudation is taken up and eliminated from the system. This has been very well done by Dr. Bennet, but Dr. Miller would spare nature such a laborious and lengthened process, or if that be not possible, lighten the task by keeping exudation within as narrow bounds as possible. After all, however, is there no ground for the belief that these inflammations may be brought to terminate by resolution, as well as external inflammations? Dr. Miller is convinced that they may be, or, at any rate, that they may be so effectually subjugated by the timeous and plentiful abstraction of blood as to give rise to scarcely appreciable exudation, from which the patient may recover much more rapidly and completely than where the disease is allowed to run its course uncontrolled. When we are not called in until effusion has already taken place, blood-letting would of course be inadmissible, or it could only be resorted to in small amount, as a palliative to subdue pain or too great febrile excitement, or to promote the absorption of the exudation.

Dr. M. Goldsmith inquired the amount of salines requisite to thin the blood.

Dr. Lawrence Smith thought the tendency of salines was to inspissate the blood by the detraction of the serum.

Dr. Wible said that he had never witnessed the effects of bleeding during the cold stage of intermittent fever, but theoretically he would oppose it. His experience strongly favored the administration of opium for the purpose of abridging or entirely preventing the chill.

Dr. M. Goldsmith alluded to the effects of bleeding during the progress of an epidemic of puerperal peritonitis which occurred in New York in 1841. In the early period of the epidemic bleeding was practiced with benefit, but later in its progress it proved inefficacious.

Dr. W. W. Goldsmith mentioned an epidemic of puerperal peritonitis which he had witnessed at Bellevue Hospital in 1844, in which blood-letting was practiced freely at first, and the patients died; afterwards brandy, quinine, and opium were substituted, and all got well.

Dr. Caldwell referred to his experience in the use of the lancet in autumnal fever, confirming the statements of Dr. Miller on that subject. He always felt his way. If the pulse appeared to improve under the flow of blood he carried it to a full extent, but if he found the patient's pulse sinking he directed and resorted to opium and stimulants.

Dr. Bayless made some remarks on the *modus operandi* of blood-letting in inflammation.

Dr. O'Reilly adverted to the frequency of hemorrhage coetaneously with congestive chills. This seemed to be nature's mode of relief, and should afford an indication for treatment.

Dr. Caldwell mentioned the practice of a physician of his acquaintance in southern Kentucky, who treated intermittent fever by bleeding in the cold stage. His treatment was in the main successful.

Dr. Bayless presented in behalf of Dr. Hewitt a specimen of twin fœtuses supposed to be of three months' development.

Dr. M. Goldsmith proposed as question for discussion at the next meeting—"What is the relation between puerperal and erysipeloid fever?"

On motion adjourned.

The Homœopathic Action in France.—The great medical cause which has been so long pending at Paris between the Allopathists and Homœopathists, has terminated against the latter. The case was simply this: The Union Medicale sometime since stigmatized homœopathy as a pretended science, and its professors as charlatans. Upon this twenty-four homœopathists of Paris brought an action for libel. The court, after a hearing of several days, has dismissed their action with costs.—*Exchange.*

Editorial Department.

Ever since man's first sickness, quacks have infested society; but never since then have their modes of action been as varied or as patent as in the present day and generation. Their arts have become so multifarious, and frequently so successful, that the whole atmosphere surrounding them seems polluted, and we require a strong light and a good lamp by which to discover any remains of the high and noble sentiment which should actuate men assuming to stand between a fellow being and his God. If we glance at almost any daily paper, we read of pills "that are not to be taken by married females as they are sure to produce abortion," and many kindred notices, so that we turn away sickened by the contemplation of their real object and the frequency of that damning crime which feeds infamy and pays the printer. If this were quackery, and quackery this alone, we might perhaps succeed in checking its devastating progress; but there are ten thousand other forms in which the monster appears, and commands attention to some charlatan who, acting upon the principle, "better reign in hell than serve in heaven," forces the connection of his name with those who scorn the association, and who foiled in his aspirations, barks, and rails, and cavils, until perchance the assaulted party is compelled at last to dignify him by a notice.

Thus, also, an obscure journalist, whose influence for evil is co-extensive with the field of his known operations, assails a cotemporary (who would not soil his pages by the record of his traducer's name, much less by an allusion to his low assaults), and hopes thus to elicit a word of recognition, even if it be but a curse. Another, writhing in the consciousness of a position which his own blindness and self-conceit forbid the just appreciation of, assumes that some one, no matter who, has breathed a spirit-spell and forged the social chain

which binds him in his little sphere, and hence he seeks with him an altercation. Another's thirst to have his name and deeds recorded, overrides all self-restraint, and rather than be unknown, appropriates his neighbor's goods, that he may smile upon the record in the morning.

So goes the world, and as we note the jarring elements of which it is composed, and mark the gratings of its machinery, we feel disposed to use a little oil and lubricate the parts made hot and dry by friction, even though it should siss at first upon the heated metal.

In this connection we quote the following from the Buffalo Medical Journal:

SIRE:—At an epoch in which the history of your benevolence is written in ineffaceable characters on the face of France; at the moment in which society, imitating your example, is striving to ameliorate the condition of the poor classes, the medical corps deem it proper to call the attention of your Majesty to one of the social evils which paralyze your generous intentions.

Sire, alongside of that medicine which consoles and cures, there boldly marches an ignorant, sordid, and illegal medicine.

If, in the cities, the instruction of the masses can sometimes counteract its grievous effects, it is not so in the country, where, unfortunately, ignorance still predominates, and where it lavishes its scandalous and deceitful promises with unrestrained publicity.

Sire, there is in this a serious danger, which barrier constantly impedes that impulsion which you so freely give to morality and humanity.

Permit us to hope that your Majesty, so careful of the children of the poor, and so provident for the aged poor, will deign to pursue his work by protecting the whole community by an efficacious *repression* against the illegal practice of medicine.

Such, sire, are the wishes of the medical corps, so often called to the honor of propagating the benefits of your touching solicitude for the suffering, but too often fettered by prejudice in the accomplishment of its mission of humanity.

We have the honor to be, with the most profound respect, the very humble and the very devoted servants of your Majesty. [SIGNATURES.]

The above is a copy of the petition of the deputies of the Medical Societies of the Seine to the Emperor, who received it with great complaisance, and even with gratification. The Emperor expressed surprise that the practice of medicine was

not more effectually protected by existing laws, and enquired if it were possible that remedies were advertised in the public journals, and sold to the public, without having received the sanction of the Academy of Medicine; and he promised that the petition should be sent to the proper minister, with special instructions to examine it and give it the attention that its importance demanded.—*Nashville Journal.*

Perhaps, however, the fault lies more with ourselves, than with the credulous public. Our ranks require drastic purging, but since death alone can rid us of many fungoid growths, we should rather direct attention to prevention than cure. What may be achieved by the Convention to assemble here in May next, we know not; but certain it is, that if something be not done to elevate the character of the profession, our name will become a by-word and reproach. A dignified bearing toward each other will ensue when gentlemen only comprise our ranks, and so soon as this bearing is manifest, we will be esteemed by others, but not until then, though the whole legislative powers of earth be brought to bear upon the issue.

We learn from the Medical and Surgical Reporter, that at the late meeting of the New York State Medical Society, convened at Albany on the 1st instant, the president, Dr. Thomas C. Brinsmade, of Troy, recommended in his annual address, the institution of a second degree in the medical profession, and suggested that the first be styled Doctor of Medicine, and the second Bachelor of Medicine. He alluded to the necessary steps to be taken to secure these degrees, and commented upon the justice and necessity of this course, believing that it would greatly elevate the profession.

Previous to the adjournment of the Society, Dr. Thompson, of Cayuga, offered a resolution that the committee to whom was referred so much of the President's address as relates to the institution of the second degree in the medical profession, be authorized to present the subject to the Convention of Professors, to be held at Louisville, Ky., in May next, as it may think proper. Adopted.

As Dr. Richardson's paper on Statistics of Hernia is the first of a series of valuable unpublished reports in the archives of

our State Medical Society, we will send this and all succeeding numbers of the Medical News in which the publication of these reports is continued, to such members of our State Society as are entitled to them. Those members who failed to respond to the calls of the State Society in 1857–8, can obtain them by remitting $3 to the Treasurer, Dr. N. B. Anderson, at Louisville, Ky. The senior editor of this journal is Secretary of the Kentucky State Medical Society, and will forward the transactions as they appear to the secretary of each State society whose address is in his possession, and will receive in exchange in behalf of Kentucky State Society transactions from the societies of sister States.

We have received from Dr. E. M. Snow, the following account of malignant pustule in Providence, Rhode Island:

The occurrence of three deaths in this city, within the last month, from this disease, has caused considerable unnecessary alarm. It is called a "new" and "strange" disease, and hundreds of persons have imagined an ordinary pimple to be a sure indication of danger. In this case, as well as in many others similar, ignorance of the true character of the disease has served to increase the alarm in the public mind. If the people had known all about the disease, we imagine hundreds of persons in this city, during the last fortnight, would have slept much better, and many foolish fears would have been prevented.

Malignant pustule is *in no sense a new disease.* Cases of it have been frequently reported, and described in the medical journals in all parts of the country, and the medical works in the office of every physician contain full descriptions of it. In "Ranking's Abstract" for 1854, four cases in New York are described by Dr. Willard Parker. In August, 1852, Dr. Peirson, of Salem, gives an account of six cases, in the Boston Medical and Surgical Journal. Hon. Robert Rantoul, Jr., of Beverly, Mass., died from malignant pustule, in Washington, D. C., August 7, 1852. One death in this city from the same cause is reported in the City Registrar's report for 1855, and one or two more have occurred since that time.

Still, the disease is so rare here, that probably many of our physicians have never seen a case. We are compelled to believe that the occurrence of three cases in a single month is entirely an accidental event, which probably will not happen again in a lifetime. There is tenfold more danger that any person in the city will lose his life, during the next month, in passing through the streets, than that he will die from malignant pustule.

Perhaps a brief description of the disease may serve to prevent much unnecessary alarm. The pustule, unless it arises from inoculation, is generally on the *under* lip. It commences with a slight pimple, and with considerable itching. Very soon a thin, bloody fluid is formed in the pimple, and it is surrounded with a livid or purple areola or ring. It also rests upon a hard base which may be felt as a small lump under the skin; but has very little, if any, pain. Unless arrested early, the swelling rapidly increases, poisonous pus is formed, and being absorbed, passes into the blood and poisons the whole system. It is not necessary to describe the further progress of the disease, or its treatment. Our only object is to enable others to recognize it in its earliest stages, and also prevent unnecessary alarm from common pimples which occur so frequently. An ordinary pimple differs from the pustule in this: it is sore upon pressure; it is of a bright red color; it has no thin, bloody fluid in the centre, and has not the same hard lump under the skin. Its progress is entirely different.

A few words in relation to the cause of malignant pustule. It is generally caused by the contact of some poisonous animal fluid or matter. Hence the disease is more frequently seen among tanners, butchers, veterinarians, and those who have the care of diseased animals. Some cases are reported among laborers engaged in unloading hides from vessels. Several are reported from skinning animals which had died of disease. Persons employed in removing and disposing of the dead bodies of animals in cities are frequent subjects of the disease. Hence it is found that the disease is more prevalent when there is an unusual prevalence of disease among animals.

Malignant pustule is also supposed to be sometimes caused by eating the flesh of animals which were diseased when killed; particularly of animals affected with carbuncles.

It is also the general opinion that malignant pustule sometimes arises spontaneously, without any contact of poisonous animal matter, or eating of diseased animal food. It is certain that cases do occur, like the recent cases in this city, where there is no evidence or probability, so far as can be known, of inoculation with poisonous animal matter, and where no plausible cause for the disease can be given.

Whether such cases do arise spontaneously without any direct poison, or whether inoculation does take place in some unknown and unsuspected manner, it is impossible to say. From the fact that diseased animal matter is known generally to be the cause of the disease, and from its known connection with diseases in animals, and from the fact that the disease never occurs as an epidemic, and very rarely except in solitary cases, we are inclined to the opinion that some direct inoculation or poisoning is always necessary to the production of malignant pustule. It is certain, from the rarity of its occurrence, that it does not arise from any wide-spread, and generally diffused cause, such as is necessary for the production of epidemic diseases.

Many ways will be readily suggested in which inoculation might take place without any suspicion on the part of the person affected. A fly in summer might carry the minute quantity of poison, necessary for inoculation, on its feet; a butcher's knife might leave the poisonous matter on healthy meat; a favorite dog or cat might be the agent of its transportation. And yet these events might occur nine hundred and ninety-nine times without any evil results; but at the thousandth time the minute quantity of poison might meet the necessary conditions for the production of its poisonous effects.

Judging from the past history of the disease, and from its causes, so far as known, we conclude that the occurrence of the recent cases in this city gives no more cause for alarm than would the occurrence of three deaths from any other accident in the same time. The occurrence of one or three deaths from malignant pustule gives not the slightest cause to believe that another case will occur. The presence of a pimple, or of a wound, of any kind on the face, at the present time, is no more an indication of danger than at any other time.

Pharmaceutical Department.

[The following are the preparations editorially alluded to in our last number.]

LIQUOR CINCHONÆ HYDRIODATUS.

By T. E. JENKINS.

The best process for preparing this valuable compound is the one we give below. Take of

Cinchon cort (Calisaya), - - - -	1.2288 grs.
Iodine (in fine powder), - - - -	1536 "
Water (distilled), - - - - -	128 oz.
Sulphuretted hydrogen, - - - -	q. s.

Convert the iodine into hydriodic acid by passing a current of washed sulphuretted hydrogen gas into sixteen ounces of water, through which the iodine, in powder, is gradually mixed; after the whole of the iodine has been converted into hydriodic acid, and the watery solution has become white, filter the solution and heat the filtered liquor until the excess of sulphuretted hydrogen is entirely driven off, the resulting liquid, which should be colorless and transparent, is a solution of hydriodic acid.

With one half of this solution of hydriodic acid, and as much water as may be necessary, thoroughly moisten the cinchona bark, in moderately fine powder, and allow the mixture to stand for twenty-four hours; then transfer the mixture to a percolator, and, by the process of displacement, exhaust the bark with a mixture of the remaining half of the solution of hydriodic acid and the water. The last portion should be displaced by pure water. If the resulting fluid measure over 128 fluid ounces it should be reduced to that quantity by gentle evaporation; if less, the percolation may be continued with water until the proper measure be obtained.

Each teaspoonful of this preparation contains the active principles of 12 grains of the best variety of Peruvian bark

and 1½ grains of iodine in the form of hydriodic acid, all in perfect solution and entirely compatible with ferruginous compounds.

LIQUOR CINCHONÆ HYDRIODATUS CUM FERRO.

Liquor cinchonæ hydriodatus may be mixed with solutions of salts of iron without producing the ordinary effects of incompatibility which follow the admixture of ferruginous compounds with the officinal preparations of bark. The following formula will yield a handsome and stable combination of liquor cinchonæ hydriodatus with iron. Take of

Cinchona bark (Calisaya,) - - - -	1.2288 grs.
Iodine, - - - - - - - -	1536 "
Water, - - - - - - - -	128 oz.
Sulphuretted hydrogen, - - - -	q. s.
Iron wire, - - - - - - - -	q. s.

Convert 512 grains of the iodine into hydriodic acid, and with it exhaust, by percolation, the bark, precisely as in the process for making "Liquor Cinchonæ Hydriodatus." While the exhaustion of the bark is going on, combine the remainder of the iodine (1024 grs.) with the iron to form a solution of iodide of iron, as described under the head of iodide of iron in the United States Pharmacopœia; when the whole of the liquid has passed from the bark, filter into it the solution of iodide of iron, and reduce the resulting liquid to 128 fluid ounces.

This preparation contains in each teaspoonful the active principles of 12 grs. of Peruvian bark, ½ gr. of iodine in the form of hydriodic acid, and 1, 1-5 grs. iodide of iron.

In both the *Liquor Cinchonæ Hydriodatus* and the *Liquor Cinchonæ Hydriodatus cum Ferro*, the hydriodic acid is combined and forms hydriodates with the bases in the bark.

PILULÆ FERRI IODIDE.

By T. E. JENKINS.

The inconvenience which we have experienced in relation to the officinal pilulæ ferri iodidi, led us to look for a process by which the iodide of iron might be permanently formed into an unchangeable pill. The disadvantages of the old officinal pilulæ

ferri iodidi, as well as that made after the process of M. Calloud, is fully stated in the comments of United States Dispensatory, (Op. cit. edition 11th., p. 1181.)

Our attention having been directed to the process of M. Blancard, we made some experiments, which resulted in convincing us of the entire practicability of the process and the superiority of the preparation it gave. With these explanatory remarks, the formula, which has proved most satisfactory to our experience, is appended.

℞ Iodini,	100 grs.
Ferri fili,	30 grs.
Aquæ distil,	q. s.
Mellis despumat,	120 grs.
Pulv: Glycyrrh,	100 grs.
Ferri per hydrogen,	s. q.

In a Florence flask put one ounce of the water, and place the iodine and iron wire in contact therein; agitate the mixture until the froth of the liquid is white, filter this fluid into the honey, which should previously have been put into an evaporating dish (preferable of polished iron,) whose tare should be marked on it, the whole mixture should then be evaporated, rapidly at first, more gently towards the last, until the contents weigh 246 grs. With this then rapidly, but thoroughly, incorporate the pulv: glycyrrh, and thus make a consistent pill mass. This mass should then be extended upon a plate of polished iron, or upon an ordinary pill tile, covered with the iron by hydrogen, and divided into 100 equal sized pills, these then must be rolled in iron by hydrogen and put again into the cleaned evaporating dish. Next make a saturated solution of balsam of tolu in ether, and add as much of it to the pills in the capsule as may be sufficient to moisten them superficially, allow the ether to evaporate until the pills begin to stick together, then immediately transfer them to an amalgamated tin plate, and allow them to dry thereon, they are then ready for use.

Each one of these pills contains one grain of iodine in the form of iodide of iron, as a nucleus, surrounded by two-thirds of a grain of metallic iron in powder, and enveloped in an impervious membrane of balsam of tolu. All the conditions are favorable to the preservation of the iodide of iron, and, conse-

quently, will guarantee their permanency, and overcome the objection to their disagreeable taste and irritating action upon the intestinal canal.

CITRATE OF IRON AND MAGNESIA.

By T. E. JENKINS.

This new preparation has been recommended and extensively used on account of the advantages which it is said to possess over many other ferruginous compounds, growing out of its tonic and slightly laxative action upon the system.

It may be readily prepared after the following formula:

℞ Citric acid, - - - - - - - - ℥2.
Per oxide of iron (hydrated), - - - - s. q.
Hydrate of magnesia, - - - - - - s. q.

To the acid dissolved in the smallest possible quantity of water, add the oxide of iron in small quantities at a time (a gentle heat at the same time being applied), until no more is taken up by the acid, filter off the solution of citrate of iron from the undissolved oxide of iron, and neutralize the solution with hydrate of magnesia, formed by precipitating a solution of sulphate of magnesia by a slight excess of liquor sodæ. The hydrate of magnesia should be added in slight excess to secure a perfectly neutral preparation. The resulting solution of citrate of iron and magnesia should then be filtered into an evaporating dish (a saucer or soup plate will answer very well) and concentrated by a gentle heat to a syrupy consistence, and finally spread in thin layers on earthen or glass plates to dry. When perfectly dessicated it is ready for use.

Burns.—Two parts of collodion and one of castor oil make an excellent mixture for burns. The mixture should be spread on with a camel's hair pencil. It forms a cuticle that protects the parts from the air and other irritants, and is perfectly painless. It may be allowed to remain until suppuration begins, when a poultice of light bread and water will remove it. The healthy granulating surface may be dressed with simple means, and readily heals. Should cracks occur in this artificial cuticle, a little more of the article will close them up. Two coats put on the first and second day will answer the purpose.—*Chicago Medical Journal.*

COD LIVER OIL JELLY.

By T. E. JENKINS.

Various processes have been suggested for gelatinizing cod liver oil, and various has been the success attending them. We have tried several of them, and find the following to give a good preparation:

℞	Gelatin (pure and white),	ʒ1.
	Water,	
	Syrup (aa),	ʒ8.
	Cod liver oil,	ʒ16.
	Oil lemon,	1 drop or q. s.

Dissolve the gelatin in the water by the aid of a gentle heat, add the syrup, and then incorporate the oil by thoroughly beating the ingredients together, lastly add the oil of lemon or some other aromatic essence to suit the taste, and mix well together. When the mixture is nearly cold pour it into wide mouth bottles. Dose from one to two tablespoonful three times a day, after meals.

EMPLOYMENT OF SUBNITRATE OF BISMUTH IN THE TREATMENT OF BLENNORRHŒA.

By Dr. EMILE CABY.

The first condition of its employment is the complete cessation of the acute state and pain; just in these apparently mild conditions of this disease that are so often difficult to overcome, it nevertheless being still contagious. Used as an injection, the bismuth salt being insoluble, the mixture must be shaken before injection—pour into the syringe—inject into the canal—retain it for two or three minutes so as to let the subnitrate settle on the surface of the urethra. In the commencement, use the injection three times a day; as the running diminishes, two injections suffice; when it ceases, it is well to continue for several days one injection at bedtime.

The author puts one ounce of subnitrate of bismuth into six ounces of rose water, the preparations may be varied.—*Journ. de Pharm.*, Nov., 1858.

Silicuretted Hydrogen.—Profs. Woehler and Buff have been enabled to combine hydrogen and silicon; they have made it by decomposing silicuret of magnesium with dilute acid. The singular property of this gas is that it is spontaneously inflammable like phosphuretted hydrogen.—*Ibid.*

ALUM AND SAVIN IN CONDYLOMATA.

In those raised patches of skin, known as mucous tubercles, or condylomata, existing about the verge of the anus and around the genitals, but especially those which are wide spread and flat, more extensive than prominent, Mr. Coulson, at St. Mary's Hospital, has been remarkably successful in producing the diminution of the swelling, and causing them to dry up, by the application of a powder consisting of equal parts of savin and alum. This is quite painless, and a cure is generally completed in a few days. Of course, an adjunct to this is cleanliness and the free use of soap and water.—*London Lancet.*

SOLVENT TO WOODY FIBRE.

By M. SCHLOSSBERGER.

Cotton paper and woody fibre are found to be soluble in a solution of basic sulphate of copper in ammonia. If this re-agent be employed in sufficient quantity, the fibres are transformed into a mucilaginous mass. Hydrochloric acid precipitates the cellulose, but of a different form, although having the same composition as cotton, &c. Silk is dissolved in the same solution more readily than cotton. Woollen only by the aid of heat.—*Journ. de Pharm.*, Nov., 1858.

CURE OF CORNS BY TINCT: IODINE.

Drs. Varges and Wagner state that the most inveterate corns are cured in a short time, when they are touched three or four times a day with tincture of iodine. If between the toes, all that is necessary is to introduce a piece of lint soaked in a mixture of tincture of iodine and glycerine.—*Ibid.*

POWDER IN CHRONIC CORIZA.

By M. SOUBRIERE.

Subnitrate of bismuth, - - - - -	60 grs.
Powdered liquorice root, - - - -	120 "
Add as indicated iodide sulphur, - - -	8 "

Ibid.

Semi-Monthly Medical News.

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REPORT ON STATISTICS OF HERNIA, WITH A NEW OPERATION FOR THE RADICAL CURE OF UMBILICAL HERNIA—ILLUSTRATED WITH A CASE.

By SAMUEL B. RICHARDSON, M.D., of Louisville, Ky.

(Continued from page 107.)

RADICAL CURE OF HERNIA.—Retentive means were no doubt resorted to by the *ancients* for relief from hernial protrusions, which may in some instances have resulted in *cure*, before anatomy, as a science, was known. The *earliest records* on the subject are found in the *early* part of the eighteenth century, which evidence a tolerable acquaintance with the anatomy of hernia, the use of the metallic spring truss, as well as numerous formularies of *operations* for the *radical* cure of hernia. In that curious repository of many *modern* inventions, the "Institutes of Surgery," by Laureut Heister, who wrote and published from 1710 to 1747, is found more than thirty separate essays on surgical subjects in Latin, embodying most of the knowledge now possessed of the means of permanent retention and for the radical cure of hernia. Of the large quarto Avignon edition of this work, in 3 vols., 81 pages are occupied with hernia alone. At page 194, vol. 2, in the chapter on *cure* of hernia, the following statement occurs: "The boasted cures of certain men without recourse to the bandage (truss) is ridiculous, superstitious, and uncertain. The *first* and principal means of cure for recent, reducible hernia is, the application and continued use of a *good truss* and adhesive plaisters as in the treatment of bubo-nocele. Nearly *all* small children and young men are thereby cured, as well as some adults, if the use of the truss is seconded by suitable regimen and diet. In old subjects with large hernia, or their reduction difficult, the

patient's sufferings are much mitigated by an appropriate bandage; but if it can be reduced, the most obstinate case can be *radically* cured by the method of Le Draw." On what constitutes a good truss, he says: "Bandages applied around the body in girdle form, aided by agglutinative plaisters applied over the hernial opening, compressing the ring and the hernial sac, not only retain the intestines within the abdomen, but sometimes procure *adhesion of the walls of the hernial sac*, the binding up or contracting at least at that point in such manner as to prevent the future descent of the hernia. To attain its full benefit, the bandage must be worn for a length time, say six months, observing at the same time a plain diet, muscular quietude, and avoiding costiveness." Much attention it seems was directed to the *radical* cure of hernia by *surgical operations before*, and at the time of Heister. Not less than *five* distinct operations are referred to and described by an author for this object, viz., cetolomy (which he condemns), le point d'or (which consisted in the ligature of the *neck* of the sac with a *golden* wire), external cauterization, ligature of the hernial sac, and internal scarification of the abdominal rings, followed by heavy pressure with a bandage *over* these so as to obtain a *firmer cicatrix*. The most popular of these Heister says, was ligature of the neck of the hernial sac, but not with gold. He says, under "ligation of the hernial sac," Sarmesius, a surgeon of Amsterdam, has given, at page 209, of his work on lithotomy (dated 1726), the description of a very superior method of operating for the radical cure of hernia without endangering the testicle. S. ingenuously disclaims its authorship, having obtained it from a Russian surgeon. The operation consists in making a *longitudinal* incision over the sac, so as to expose and open it; its contents are then reduced into the abdomen, the sac drawn forcibly without the wound, carefully separating the parts with which it is connected, and embraced with a large ligature and tied as near the abdominal muscles as possible. The wound is dressed until the ligature falls off and the wound closed. Much success has attended this operation without injury to the testicle and without the loss of a single case. It is particularly applicable where the hernia can not be retained by a truss and the sufferings of the invalid great.'

From these extracts we are at no loss to understand the state of hernial surgery nearly 200 years ago.

The *radical* cure of hernia has occupied a large share of public as well as professional attention in the United States for the past eighteen years, originating in what has been regarded as an *accidental* discovery of an uneducated but respectable farmer of Madison county, Kentucky, named Stagner. It is to be remarked that the increased interest and study of this subject here, has extended to Europe *generally*, where more modifications of *retentive* trusses and proposed operations for radical cure have been made within the last fifteen years than for a century before, all following in rapid succession the accidental employment of a "*green buck-eye chip*," by Mr. Stagner whilst at work on his farm, placed under the pad of an old truss, which failed before to retain his hernia. Mr. S. averred that his hernia was effectually *retained* by the chip or block as thus applied, for which he substitutes another *block* approaching in shape a common truss pad, rough and angular on its under surface, attached to a rather strong truss spring. The pointed, rough, and conical form given to his block on its *under* surface by Mr. S., together with increased *strength of spring*, gave rise to unusual inflammation, swelling, and sometimes ulceration of the skin, over the abdominal rings and inguinal canal. Being an athletic, lean man, not particularly sensitive, he wore his rough instrument for weeks and months *constantly*, during which time his hernia was *completely* and *constantly* retained. Upon finally removing his truss, the hernia did not descend, and so continuing, he regarded himself as cured, in which the neighboring physicians concurred, as they were familiar with his case. They attributed this favorable result to inflammation produced by *pressure*, extended to the neck of the sac, thereby closing it by adhesion. Encouraged by the favorable results of his own case, and of one or two others in his vicinity for whom he applied his coarse instrument, Stagner obtained a patent from the United States for his truss. About this time he came to Lexington, Ky. (1833–4), to exhibit his instruments to the faculty, solicit their approbation, and sell rights. He met with but little encouragement in this visit; his instrument was but slightly noticed by the profession, and after a short stay, and selling one or two rights to makers and ven-

ders, he left to seek his fortune in some other quarter. We do not learn that Mr. S. derived much pecuniary emolument from his patent, although he sold a number of State rights to graduated physicians and others, with whom a temporary enthusiasm had been produced — doomed to speedy disappointment.

But a short time elapsed before Dr. Hood, of Clark county, Ky., and H. Chase, M.D., of Philadelphia, Pa., respectively obtained letters patent for wooden block-headed trusses, modified in form to those of Stagner. Drs. Chase and Hood commenced the *joint* applications in Philadelphia of their *improved* instruments in person, and being encouraged by the results of some of their most favorable cases, they presented their instruments and principles of treatment to the Philadelphia Medical Society, asking an opinion thereon. The *eclat* produced by the *radical* cure of hernia by the *new* instrument, was such, that this venerable society was not slow in appointing a committee to investigate and make a report thereon. This committee consisted of Reynell Coates, M.D., William Ashmead, M.D., and Isaac Parish, M.D. The results of their investigations of the subject, extending over a period of between two and a half and three years, may be found in the 19th and 20th vols. of the American Journal of the Medical Sciences, entitled, "Report of a Committee of the Philadelphia Medical Society, appointed December 27, 1834, to investigate the character of Stagner's truss and other proposed means of radical cure in Hernia." The facts of this report are worthy of full credence, and the execution of the work assigned to this committee may be regarded as one of the best examples in American medical literature of the application of genuine inductive reasoning to the elucidation of medical truths. It is unquestionable that under methodic compression with the wooden block spring truss, properly formed and adapted to the *perfect retention* of the contents of the hernial sac, this committee witnessed in from 15 to 20 instances the continued retention of the hernia from one to twelve months after the instrument had been laid aside by the patients, and these they regard and designate *radical* cures. These results were witnessed in oblique and direct inguinal hernia, and umbilical hernia. All that seemed to be accomplished in the few cases of femoral hernia, the treatment

of which they witnessed, was *perfect retention*. They give Mr. Stagner, of Kentucky, the credit of *originality* in *first* suggesting *wood* as the best material of which to construct the *truss pad*, but give the decided preference to the form of Dr. Chase's truss heads, as they had been variously modified in form to adapt them to the different varieties of hernia. They, however, say that for twenty years or more, a truss has been used in Philadelphia with a wood pad, called the Eberlos or Rachet truss, which from its imperfect form was utterly useless as a means of retention. Ivory has also been used for generations with which to make truss heads, and answers a good purpose in some cases.

The *modus operandi* of the truss in effecting a *radical* cure of hernia is not without interest. A majority of the population, it is believed, refer the cure to the results of *inflammation*, produced *in* and *adjacent* to the abdominal rings, canal, &c. This may be true when operative procedures are resorted to for this object, which it is doubtful if this be the case, when retention by trusses is the means employed. For centuries it is known that truss heads have been made of *soft* or elastic materials generally; it is equally well known that radical cures have frequently resulted from their use when the hernia was *retained*, reliance being placed upon *perfect*, continuous retention alone. By reference to the *first* table of the "London Hernia and Truss Society," embodied in this report, it appears that *radical* cures resulted from treatment in 3,690 cases of inguinal and umbilical hernia, in which the old *cushion* headed trusses were alone employed with a view to *perfect retention*. In the *second* report of the committee of the Philadelphia Medical Society (see American Journal of Medical Sciences, vol. 20, p. 542), it is stated, "that the most perfect *retentive apparatus*, is that which offers the strongest probability of radical cure; and that any *considerable irritation* produced in the parts, by the pressure of a block, may be considered in the present state of the investigation as of secondary importance." Again: "The *radical* cure of hernia by trusses depends almost exclusively, if not entirely, upon the *accuracy* and *permanency* of the *retention* effected by the instrument. That considerable or long continued irritation, so far from being an advantage, in reality *opposes* the successful treatment." A little further

on it is added: "That the retentive power of solid blocks exceed cæteris paribus by considerable difference that of pads composed of softer materials."

I can add my own testimony in the treatment of quite a considerable number of cases, in which radical cures resulted from *retentive* trusses, but little irritation or inflammation of the skin was produced or desired. I have known in some instances the irritation produced by wearing a wood or ivory headed truss, so *great* as to lead to ulcerative absorption of the skin, demanding an abandonment of the instrument. What nature demands is a *perfect, continuous* removal of the *distending cause* from the rings and canals of the belly, involved in hernial protrusions, and she will ordinarily do the rest. A species of contraction and closing of the openings results, whereby they are reduced to an approach to their normal condition. And it is not very material in the result how you effect it, so the required condition obtains. Radical cures of hernia are occasionally witnessed, especially when of recent origin, by protracted confinements to bed in the recumbent position, as in cases of fractures of the large bones of the lower extremity or protracted fevers, *without* the aid of pressure or other retentive means. Dr. Raven,* seconded by Mr. Breschet, reports eight radical cures of hernia by *designedly* confining the patients on their backs, the pelvis raised higher than the diaphragm, and the side of the hernia raised higher than the sound side. Astringent washes were also applied over the rings, and *absolute rest* enjoined. Average duration of treatment two months, and *no* relapse when treatment was carried out.

No case of radical cure of *femoral* hernia is reported in the tables of the "London Hernia Society," doubtless because of its greater difficulties of retention.

The committee of the Philadelphia Medical Society mention seeing some cases of *femoral* hernia under treatment with the wooden block, expressly state, that they witnessed no undoubted cures resulting therefrom. Femoral, as well as congenital ventro-inguinal hernia, are the most difficult *to retain.* One or more of the ancient *operations* for the *radical* cure of hernia, have been *recently* offered in a treatise on "Operative Surgery," with slight modifications, as new inventions. Those

* Gazette Medicale, 1830.

which are most in favor at present, are the introduction by puncture and injection of some irritating fluid into the neck of the sac, with a view to developing adhesive inflammation of its walls, and thereby forming a mechanical impediment to the future descent of the hernia; or yet more recent, the permanent *invagination* of a portion of the scrotum into the external abdominal ring and abdominal canal, with a like object in view. The former of these, it is said, has been practiced recently in one or more of the Atlantic cities by graduates in medicine (guilty of irregularities) as a secret. Dr. Jayne, of Illinois, formerly of Tennessee, exhibited to me fifteen years ago, when a member of my anatomical and surgical class, the instruments with which he had executed this latter operation *successfully*, in a number of instances, as he assured me. These, or other operations with a like object in view, of establishing a barrier within the canals or rings of the abdomen to the future descent of the hernia, may be occasionally practiced in particular instances by operative surgeons; nevertheless, a *well-adjusted spring* truss with an *unyielding* head, of just such *form* and *power* as *to completely retain* the contents of the hernial sac, in their normal position, must now be regarded as the best, and almost universal agent in the treatment of reducible hernia, either with a view to its *retention* or *radical* cure. The *forms* of blocks proposed and used by Dr. H. Chase are probably the best. They may be found delineated in the report referred to. I find them needlessly large and clumsy, and they may be advantageously reduced, preserving the form which may be modified to meet the different *varieties* of hernia. By dispensing with the intermediate attachments of the blocks to the spring, which may generally be done, it constitutes the simplest and least expensive retentive instrument ever devised.

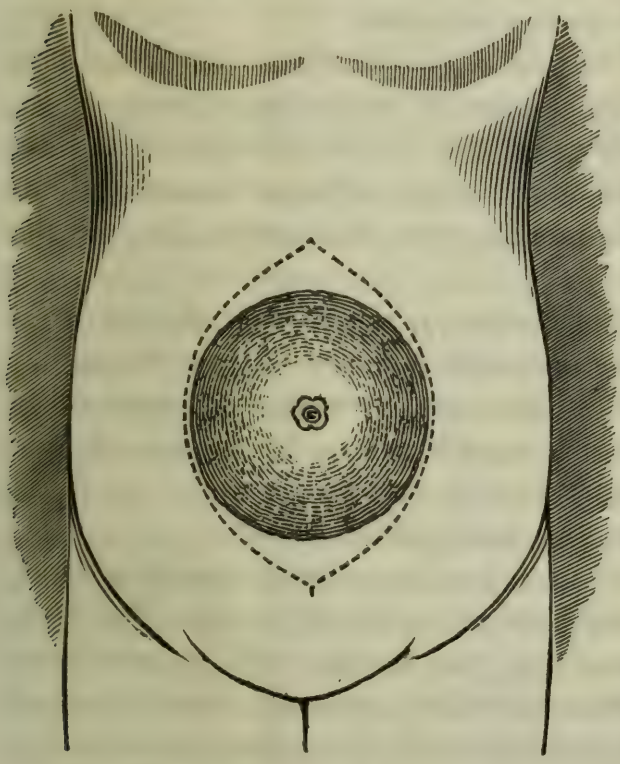
In the year 1853, I devised and executed the following operation for the *radical* cure of *umbilical* hernia, which, from its simplicity, freedom from danger, and successful issue, is offered to the profession, as possessing advantages over the old and *unsafe* procedure of applying a ligature around the sac. The notes of the case are as follows, viz.:

Large, reducible, umbilical hernia of 13 years' standing—Operation—Cure.

Mrs. S——, resident of another State and city, aged 31 years, the mother of six children, and of sound constitution, discovered whilst *enciente* with her *eldest* son, now 13 years of age, a *tumor* at the umbilicus. This tumor did not attain inconvenient magnitude until after gestation had progressed with her *youngest* child, now 5 years old. Then the hernia increased rapidly in volume, and became painful, particularly *after eating.* Severe pains *continued* after her subsequent accouchment; were mistaken for *after pains.* She sent immediately for her medical attendant, who, fortunately for her, was an intelligent gentleman, and discovering the cause of the difficulty, reduced the hernia by the taxis after half an hour's effort, without any other means but demanding the full force of both his hands, in firm compression. During the strangulation, the patient had general spasms and intense pain, with sick stomach. A *glass* head truss was ordered and applied immediately, but worn with much inconvenience. I was consulted by this lady in 1851, when the hernial tumor had attained about the size of a goose egg, of irregular form, the hernial opening admitting the passage of two fingers. I directed a wooden block padded spring truss, but, not fitting, was worn with difficulty and irregularly. In January, 1853, this was replaced by a small sized *conical* block pad and spring truss. This also proved unpleasant and inefficacious. An operation was now solicited by my patient, a second time, having demanded it the year before (1852). I declined operating in 1852, informing her of the dangers of the *ordinary* operation by *ligature of the sac.* She was the more solicitous for relief on account of the extent of her social intercourse—the want of success which had attended the efforts to fit her with a truss because of her unusual rotundity and *embonpoint*—and more especially, I believe, from the fact that five of her six children, either had been, or were then, the subjects of umbilical hernia! Finding my patient had determined to go to Boston to be operated on, by an advertising specialist, if I refused to operate, I devised and executed the following operation, assisted by Dr. John Hardin, who concurred with me in its propriety; the lady's husband being present.

An elliptical incision one and one-fourth inches in depth, extending through the skin, cellular tissue, and fat, was made

around the base of the tumor, exposing the hernial sac in its entire circumference. Flaps were *raised* right and left of the hernial tumor, embracing all the textures above the fascia, and of sufficient breadth to admit of the cut margins being barely brought in contact by a sliding motion of the *flaps* immediately over the *centre* of the tumor. The *epidermis* having been previously removed from the immediate *surface of the tumor* by a blister, the margins of the flaps were secured in contact by five interrupted sutures, with adhesives between, and maintained by a broad bandage encircling the body, with compressers suitably applied, right and left of the centre. The hemorrhage did not require the ligation of a single vessel. The form of the hernial tumor, as well as the shape of the incisions made in the operation, will be better understood by the subjoined woodcut. The continuous lines mark the margin or contour of the tumor; the *dotted lines* that of the incisions. The vertical extent of the incisions was about $6\frac{1}{2}$ inches, whilst the distance between the incisions transversely was about 4 inches. In three days the margins of the wound had united, and, *apparently*, the under surface of the flaps to the upper surface of the tumor beneath. Precaution had been taken before closure of the wound to reduce the contents of the hernial sac, and so to maintain them by compression exterior to the wound. This operation was performed March 29, 1853. The size of the ellipsis formed by the incisions was 6 by 4 inches. Owing, perhaps, to some erysipelatous inflammation following the operation about the sixth day, as well as the imperfect operation of the blister, only *partial* adhesion took place between the inferior surface of the



flaps and the superior of the tumor, from which the epidermis had been removed, July 19, 1853. The wound was opened, and the true skin exsected from the surface of the original tumor, and the lips of the wound were again brought in apposition by adhesives only. Perfect union followed in a few days. At this second exposure of the umbilical ring, it was ascertained that it had contracted more than *one-half* since the first operation. The patient was in the anæsthetic state during both operations.

This formulary, as described, was, in its conception and execution, based upon the almost certain contraction and closure of the hernial opening, following a *perfect retention* of the hernial sac and contents independently of inflammatory action, and well illustrates the *rationale* of the radical cure of hernia by trusses, for which we have contended.

I have seen this lady very recently (October, 1853), and it is ascertained that a perfect closure of the umbilical ring exists, with effacement of the hernial tumor; no evidence of disease or of an operation remaining, except a linear cicatrix about five and a half inches in length, upon the median line of the abdomen.

Were I to execute this operation again, as I should most likely do under like circumstances, I would expose the sac at once, by removing the integuments covering it, proceeding otherwise as described—not apprehending by the use of proper precaution, the production of peritonitis.

Five cases of hernia in one family of children!

Of this lady's six children, it has been stated that five either have been, or now are, subjects of umbilical hernia. The first, a son, was cured by retaining the hernia with a non-elastic girdle, to the under surface of which a smooth, hemispherical wooden block, one and a half inches in diameter, was attached. This hernia occurred at eight years of age, and was cured by twelve months' treatment. Second son escaped hernia; but had hydrocele at two years of age, which was cured by acupuncturation, in three months' treatment, by a professional friend of mine. The third, a son also, became the subject of hernia at seven years of age—supposed to have been developed by the exercise of *swimming;* is now under treatment. Fourth, a son—hernia discovered while an infant at the breast; is

now under treatment for radical cure. Fifth, a son, now eight years old, developed when nine months old; is under treatment. The sixth is a daughter, now in her fourth year since February last (1853); also under treatment. In this case the mother thinks the hernial opening extended above the umbilicus in the linea alba.

The history of this family favors the opinion that hernia is sometimes *hereditary* and transmissible, whilst this is not strictly true in the ordinary sense of the term. There has been in these cases, without a doubt, a transmitted tendency, or increased liability to the infirmity by imperfection, defectiveness, or arrest of development at the umbilicus, or in its immediate vicinity.

(To be continued.)

A CASE OF TRAUMATIC TETANUS.

By S. M. HOBBS, M.D., Mt. Washington, Ky.

On the 1st day of May, 1856, I was summoned to see a negro man, 20 years old, whom the messenger informed me had "cramp colic." Upon my arrival at the place where the boy was, I found him rolling about on the floor in great agony, with pain that he referred to his stomach and breast. The pain recurred in paroxysms, with intervals of ten or fifteen minutes ease. Upon closer examination, I found that upon every recurrence of the pain, he had well marked spasms of all the voluntary muscles. I sat down by his side for an hour, observing him closely, being as yet unable to classify his disease. At length, after having gone over the whole category of questions in endeavoring to arrive at the cause of his disease, I asked him (for I thought I was getting a clue to it), whether he had not stuck a nail in his foot. He informed me that he had "tramped upon an old nail and that it had run into his foot about an inch;" but it had been done three weeks since, and the wound had entirely healed. The wound was of such a slight nature that no attention had been paid to it, and it had been entirely forgotten until my question brought it to his memory. I was at once enabled to identify the disease; it was tetanus—traumatic tetanus—caused by a wound in the sole

of his foot, made by a rusty shingle nail. Upon examination, the wound was found to have been healed, leaving slight tenderness and induration. The spasms had evidently been well marked for twenty-four hours before I saw him, and were now of the most violent character, throwing the whole body into the most frightful contortions.

The indications of treatment were plain enough, viz., to remove the cause if possible, and to relieve the great nervous excitement. The place where the wound had been was freely laid open, some scales that had been left upon the withdrawal of the nail removed, and an emollient and anodyne dressing applied.

The second indication was hard to meet. The suffering of the patient was of such a dreadful character that we almost instinctively sought for something to allay it, to accomplish which, opium in some of its forms seemed to be the most ready and available agent. Having premised a copious bleeding, 1 grain of morphia was administered, to be repeated every two hours until the nervous excitement was allayed and the spasms controlled.

Nine o'clock, P. M.—The patient has taken five doses of the morphia, but the spasms continue without abatement, they are even more frightful than they were in the morning. Applied a vesicatory the whole length of the spine, administered an active cathartic, and continued the morphia.

May 2d, six o'clock, A. M.—The cathartic has acted, the blister drawn, but the spasms continue with unabated fury. The morphia has had no perceptible effect. The muscles of respiration are so much involved in the spasms that breathing is performed with great difficulty—indeed suffocation is threatened continually. After considering the case thoroughly in consultation with Dr. Gore, of Bloomfield, it was agreed to try the virtues of chloroform. It was accordingly administered, arresting for a while the spasms; but after a short time they would return. Again and again they were arrested, but to return as soon as the anesthetic was withdrawn. At length we determined to keep the system under the continued influence of the chloroform as long as it was tolerated, or until there was some decided contra-indication to its further use. It was now twelve o'clock.

Eight o'clock, P. M.—The patient still under the influence of the chloroform. His breathing free and easy, not the least symptom of spasm in any of the muscles, pulse 90 and regular. Continued the chloroform.

May 3d.—The condition of the patient not changed perceptibly since last date. Breathing and pulse good. No sign of spasm. Treatment continued.

Twelve o'clock.—Condition same as in the morning. Pulse 100. Has now been under the influence of the anesthetic twenty-four hours. There is no contra-indication to its further use. Is continued.

Eight o'clock, P. M.—Condition pretty much as before. Pulse a little more frequent; breathing good enough. Continue the treatment cautiously.

May 4th, six o'clock, A. M.—This morning, in consequence of our supply of chloroform having been exhausted, I found our patient conscious, and "himself again;" free from pain, free from spasm, his breathing easy and natural, his pulse but slightly accelerated, and he was seemingly, as he expressed himself, cured. He has now been free from all anesthetic influence for five hours, and as yet there has been no symptom of returning spasm. Directed a little food, with perfect quietude.

Eight o'clock, P. M.—Found the patient quiet and free from spasm. The nervous system seemed to be entirely quieted. Directed quietude, and left him for the night; feeling almost confident that the chloroform had asserted its supremacy over this, the most frightful of all diseases.

May 5th, eight o'clock, A. M.—Rested tolerably well through the night. Has had no symptom of spasm for more than twenty-four hours. Shortly after this, owing to an occurrence that was unforeseen and beyond our control, he became greatly agitated and excited, which resulted in a return of the spasms, at first of a light, but soon of a very violent character. We again applied the chloroform, but it would now have no effect; the system had either become so fortified by protracted use, that it refused to yield any longer to its influence, or the article we administered was inert, which last was probably the case, as we had obtained a new supply. The spasms increased in violence, until death brought them to a close, in a few hours after their return.

The influence of the chloroform had been maintained uninterruptedly for forty hours, the patient not having been conscious in that length of time, and after the subsidence of the anesthetization, he was free from the spasm thirty hours. I feel convinced that if we could have maintained a perfect state of quietude, that the spasms would not have returned, and the patient would have recovered.

Were I called to treat another case of this formidable disease, I would not hesitate a moment to administer the chloroform so as to maintain anesthetization (unless positively contra-indicated) until the nervous excitement subsides. Is it not possible—nay, even probable—that could we allay the great nervous excitement, by anesthetics or otherwise, for a sufficient length of time, that the nervous lesion might pass off, and health be re-established? In the case under consideration, so far as visible manifestations were concerned, the disease was entirely suspended for more than thirty hours. The nervous excitability had been for that length of time allayed, and if the effect of the remedy could have been obtained again, is there not reason to suppose that it could have been allayed entirely. Pathologists agree, that generally there is not sufficient organic lesion of the nervous centers to produce death, but that death is caused by functional lesion. In the present instance, death evidently occurred by apnoea, caused by tonic spasm of the muscles of respiration. Thus, if we could have allayed the spasm of that set of muscles, so that breathing could have gone on, is it not highly probable that the irritation or excitability of the nervous centers would have passed away and health been established? With a view to allay this nervous excitability, it has been proposed to administer the woorara, an agent that instantly allays consciousness, voluntary motion, and of course respiration, and to keep up artificial breathing until the system recovers from the effect of the poison, with the expectation that upon returning consciousness the nervous system would be relieved of the unnatural and intense excitability under which it had previously labored. In fact, the availability of the plan has been successfully tested upon animals affected with this disease. Chloroform would fulfil the indications proposed by this theory, without subjecting the patient to any serious danger.

CASE OF TRAUMATIC TETANUS SUCCESSFULLY TREATED BY ATROPIA.

By the EDITORS.

Edward M——, aged 14, a lad of unusually excellent physical and mental development, wounded himself by the accidental discharge of a pistol, on the 27th of last December. The muscular mass constituting the hypothenar eminence of the left hand was severely lacerated; the integument and subjacent tissue for 8 or 10 lines over the upper third of the metacarpal bone of the little finger were entirely lost, and the bone partially exposed, but not denuded of periosteum.

The wound was cleansed as thoroughly as practicable, and its lacerated margins gently approximated and supported by strips of adhesive plaster, and water dressings applied. The wound was again dressed on the 30th, when its condition seemed in every respect satisfactory. A point of laceration reaching over upon the back of the hand six or seven lines in length had united by the first intention. The principal wound was suppurating healthily. From this time until the 8th of January no unusual symptoms were manifested. The lad seemed to enjoy his accustomed good health, and with his hand in a sling mingled in the pastimes of his playmates. On Saturday, 8th January, he complained to his aunt that his left shoulder felt uncomfortable, and that in walking quickly up stairs the wounded arm "would jerk," without his ability to control it.

January 9th.—Complained of increased uneasiness in his left shoulder, extending to the spine.

Jan. 10th.—Visited the junior editor at his office. His wound was dressed, and seemed entirely healthy. Did not mention any of the above symptoms.

Jan. 11th.—Visited at his residence. Had some fixation of the jaw with swelling of the face; complained of pain around a diseased molar tooth. The family also stated, that he had on a previous occasion suffered similar symptoms from an alveolar abscess. Under these circumstances it was difficult to make out a positive diagnosis, although his condition gave rise to the strongest apprehensions that tetanus was impending. Fomentations of warm hops were applied to the jaw, and quietude and watchfulness enjoined.

Jan. 12th.—Morning visit. Symptoms more strongly pronounced, though still somewhat equivocal. Marked spinal rigidity. No spasms noticed by family.

Eight o'clock, P.M.—Slight convulsions came on before noon, and had increased in severity through the afternoon. He was found lying upon his back, with strongly marked opisthotonos; the left hand singularly flexed, and forcibly adducted upon the wrist. He had taken in the early part of the day a seidlitz powder, which slightly purged him. Complained now of no pain except when the "jerks" came on. Any attempt to dress the wound was succeeded by violent spasm. We determined to treat him with chloroform, and having procured a large quantity that was known to be pure, we commenced its administration. He was readily brought under its influence, when complete relaxation of all the fixed muscles at once ensued. While in a state of anesthesia the wound was carefully examined. The whole surface was covered with granulations, healthy and desirable in character. Suppurative discharge normal. The wound was carefully cleansed with tepid water, and a poultice of flax seed meal applied warm, and sufficiently large to envelop the whole hand. Upon emerging from anesthesia, as was predicted, he vomited some coffee and bread taken shortly previous to the administration of the chloroform. The patient was watched through the night by Messrs. Strother and Morgan, students of the University, who intelligently and faithfully executed our instructions, which were, to maintain the influence of the chloroform not to the production of continuous anesthesia, but to renew its use as often as spasmodic tendencies were manifest.

Jan. 13, eight o'clock, A. M.—Patient had used through the night about ʒ6 of chloroform; was now so averse to it that the slightest approach of the impregnated handkerchief excited violent convulsions. He was now entirely from under its influence, and his condition in no respect improved. It was obvious that the sedative effects of the anesthetic would not be tolerated through the long interval of time during which it might be necessary to control the spasms. Consequently, at the suggestion of Dr. Wible, who had at our request given his aid in the treatment of the case, we determined to turn to

some remedy which would counteract the convulsive tendencies to such a degree that they should not destroy life either by direct interference with its indispensable processes or by exhaustion, and then trust to the case becoming "chronic" and ultimately recovering. To secure this end, the above-mentioned gentleman suggested atropine, which we accepted, and upon the use of which our patient was immediately placed. He was ordered 1-20 grain, and this quantity to be repeated every third hour until otherwise directed.

Ten, A. M.—Took first dose. Twelve, M.—More tranquil; pupils dilated; continue treatment. At two, P. M., brought under influence of chloroform, and wound penciled freely over the whole surface with solid nitrate silver; then a piece of lint, which, after being moistened, had been rubbed upon a stick of nitrate silver, was placed in contact with the wound, and warm water dressing over this.

Eleven, P. M.—Took fourth dose of atropine; is decidedly more tranquil; sleeps quietly; pupils widely dilated; cheeks flushed; spasms somewhat mitigated, and observably less frequent. Thinking that probably the vapor bath might be found a useful adjunct, we determined to employ it. The method recommended by Budd in treatment of croup was the mode of procedure instituted—namely, having surrounded the bed both at the sides and overhead with a close canopy of blankets or quilts, a tub of hot water was placed upon the foot of the bed into which hot bricks were placed sufficiently often to keep the atmosphere within the curtains thoroughly imbued with warm moisture. This was immediately instituted.

Jan. 14th, three A. M.—Took fifth dose of atropine. Six, A. M.—Sixth dose. Eight, A. M.—Patient complains of dryness of the throat and nostrils; his lips are covered with pellicles of dry, viscid mucus; pupils widely dilated; countenance of a dusky florid hue; pulse about 130; sleeps a good deal, and quietly; spasms still recur, though less frequently, but occasionally of great violence; some delirium. Ten, A. M.—Seventh dose. Half-past eleven, A. M.—Pupils dilated to their widest extent; can not distinguish objects; delirium increased; talking incoherently and incessantly when awake; no decided spasm since morning visit. Being fearful of dangerously toxic effects of the belladonna, we directed its tem-

porary abandonment, and ordered ¼ gr. of sulph: morphia. Shortly after this, 10 grs. of calomel uncombined were directed; vapor bath continued; wound dressed by placing lint over its surface imbued with aqueous solution of extract belladonna and warm water dressing over this. At ten P.M., but little change; still delirious; but pupils contracted greatly; ¼ gr. morphia repeated.

Jan. 15th, one A.M.—Decided tendency to return of spasms; pupils contracted; still delirious; the muscles affected by tonic spasm more rigid; resume the atropine. Three, A. M.—Wildly delirious; pulse very rapid; surface dry; has had one convulsion, which, from the description of his nurse, we thought was probably referable to the atropine. Six, A. M. —Ordered 10 drops tincture digitalis, 10 drops liquor potass, ʒ1 spirits nitre, to be taken at once, and to be repeated in two hours;* after the first dose he slept until eleven, when the second dose was given, At two, P. M., atropine resumed in 1-40th grain doses every third hour; calomel had operated three times; first dejection contained scybala, the others large and dark colored.

Jan. 16th.—But little change; has an occasional spasm; sometimes sufficiently severe to produce painful laceration of the tongue; compelled to abandon the vapor bath in consequence of the patient's frequent jactitations rendering the proximity of hot water dangerous; is much annoyed about his nostrils, from which large pellicles of tenacious dry mucus are occasionally drawn; is very incoherent, and behaves very much like a subject of delirium tremens, only his illusions seem generally to be of an agreeable character. Examined the wound, and found it dry and reddened in appearance; discontinued the belladonna dressing, and ordered slippery elm poultice; atropine had been continued in 1-40th gr. doses every three hours since its resumption.

Throughout the 17th, 18th, and 19th there was no very marked change, except the gradual abatement, both as to violence and frequency, of the convulsions. The atropine was continued without intermission in 1-40th gr. doses, and ¼ gr. morphia given nightly. The patient continued delirious, but

*** This prescription was given for the double purpose of counteracting the atropine and of exciting urinary secretion, which was scanty.**

not so wildly so; was able to obtain some hours each day of quiet sleep, and took sufficient fluid nourishment to sustain his strength.

Jan. 20th.—Spasms so slight that it was not judged expedient to keep up the influence of the atropine; it was consequently discontinued, and sulp: quinine in solution given in two grain doses every third hour. Beef tea and milk punch for diet; and strictest quietude enjoined.

Jan. 21st.—Same treatment.

Jan. 22nd.—Withdrew all remedies; similar diet and regulations in regard to regimen of the room. The patient had now no spasmodic manifestations except when agitated, either by an unexpected touch or noise, or by emotional excitement and petulancy, in consequence of his inability to take his nourishment without great inconvenience. The trismus and general muscular rigidity were but little if at all abated. He complained greatly of a hard tumor in the epigastric region, which we supposed to be a tonic contraction of the right rectus abdominis muscle. This enlargement, like the tonic contractions of the masseter and other muscles affected, disappeared so gradually and slowly, that the lad was brought before the medical class of the University, on the 12th of February, as affording a marked illustration of the tetanic countenance and still persistent trismus. The only remedies administered except those above noted, were an occasional mild aperient of solution of citrate of magnesia.*

So far as the illustration of its influence in the treatment of this case furnishes us authority for speaking, we are satisfied that our appreciation of atropine as a remedy in tetanus, can not be over-estimated. It subdued time and again, with a promptitude and a measure of extent too striking to be mistaken, the increasing spasms, and soothed the general excitability of the system. But medical periodicals have so often

* One grain in about six-eighths of atropine had been taken in the progress of the treatment. The process of granulation had gone on healthily and uninterruptedly in the wound, so that on the 19th it was dressed with simple cerate, and left without further attention. Throughout the progress of the case, there were no appearances about the wound pointing to it as a source of so much constitutional disturbance. Around the line of laceration, spoken of previously as having closed by first intention, there was a deep lividity of hue not observable elsewhere; but whether this discoloration marked the point of irritation or not, we were not able to decide.

been the vehicles of promises to the profession, of cures for tetanus, that we do not intend to promulgate this as such, but only to add our testimonial to that of other observers, who have witnessed its beneficial effects.

There may be instances in which, from some constitutional bias, belladonna cannot be borne, for it is well known that individual idiosyncrasies are more often and prominently displayed in regard to narcotics, than to any other class of medicines; consequently, one of this class of remedies may prove more apposite to one case than another, either from some particular pathological condition complicating the tetanus, or from general constitutional diathesis. Chloroform, without doubt, is the most efficient agent for the control of the spasms, but unfortunately its toxic effects upon the blood unfit it for cases where very long persistency of influence is required. And all authors who have observed and written much in regard to tetanus, teach us to place our principal reliance for success in the safe conduct of our patient through the first four or five days, after which the disease is spoken of as "chronic," and manifesting a tendency towards spontaneous subsidence. Our measures of treatment were from the first directed towards the attainment of this end. One of the most strongly urged points of treatment in this case, and, as we conceive, one of the most important, was, that our patient should be kept *absolutely free from all needless sources of excitation.* Strange faces were prohibited from his room — noises were interdicted — his nurses were admonished to be gentle, calm, and quiet in their attentions; sudden currents of cold air, and all unnecessary contacts with his bed, or touching his person without previously apprising him, were avoided; and fortunately for our success, the instructions of a physician were never more intelligently or faithfully complied with, than by the family who had our patient in charge.

Then, if practitioners would content themselves with simply *moderating* the violence of the convulsive paroxysms of tetanus, by such agents as may be found best suited to each individual case, and supporting their patients' strength, look to the ultimate spontaneous cessation of the disease, we sincerely believe that its mortality would be materially lessened, although it may long continue to be classed as one of the opprobria of our profession.

VERATRUM VIRIDE IN ENTERITIS, &C.

[By E. T. SCOTT, M. D., of Fulton, Mo.]

I wish you much success in your enterprise, and will be glad, so far as my poor ability will permit, to lend a helping hand occasionally.

The only matter of interest that presents itself just now, is suggested by a severe case of inflammation of the bowels, complicated with pneumonia, in which I used, with satisfactory results, *veratrum viride.*

Jan. 31st.—I was called to see Emma T., about 9 years of age. She had been complaining about three days. I found slight tenderness in the region of the umbilicus, and over the descending colon; no tympanitis; slight cough; physical signs showing some bronchial inflammation; pulse 124. Treatment—Ipecac ½ gr., Dover's powder 1 gr., calomel ¼ gr., every 4 hours, with warm fomentations over the bowels.

Feb. 1st.—Tenderness over the bowels very decided; some tympanitis; muttering and feeling about during sleep; some mucus in the discharges; lips dry, and tongue coated; pulse 130; lung symptoms not more developed than yesterday. Treatment the same as yesterday, with a blister, 4 by 5 inches, over the bowels.

Feb. 2d.—Tympanitis slightly subsided; blister drawn well; but pneumonia developed in the lower lobe of the right lung; pulse 140; respiration 60; some delirium. Treatment—blister over the lungs; same powder as above every 4 hours, with 4 drops of a mixture of equal parts of comp: syrup of squills and veratrum viride, dose to be increased one drop every 4 hours until pulse becomes reduced.

Feb. 3d.—Both blisters doing well; the veratrum had been increased as directed, until the dose reached 6 drops, and was continued at this; pulse after the third or fourth dose, down to 80 or less; patient calm and quiet; no pain; no delirium, and but little cough, and loose; tongue moist; respiration 40. Same treatment continued.

Feb. 4th.—During the night the veratrum had been omitted entirely as the pulse had continued at 80 or less without it. During the forenoon, the pulse began to increase in frequency; the veratrum (4 drops) was again given, but the pulse continued

to rise, and when I saw the patient at noon, it was 120; face flushed; great restlessness; lips dry; respiration increased from 40 to 60; frequent small, fretted, foamy operations on the bowels, and indeed all the unfavorable symptoms re-instated. I directed an additional portion of the veratrum, and so soon as it had time to have its effects, the pulse came down to 80; the patient calm and quiet; flushing of the face subsided; respiration from 60 down to 40 again; and a few drops of laudanum quieted the bowels.

Feb. 5th.—During the last 24 hours, four drops of the veratrum every 4 hours, controlled the circulation; patient calm and comfortable; tympanitis and tenderness of the bowels subsided, and operations greatly improved. Bronchial respiration giving place to vesicular murmur—some appetite, and countenance brighter. From this time veratrum was discontinued, and the patient continued to improve.

Second Case.—About two months since, during the prevalence of an epidemic resembling typhoid fever, I also used the veratrum in the case of one of the deaf mutes at the State Deaf and Dumb Asylum. The attack was a severe one, and the pulse soon up to 135—mouth dry, bowels tender and slightly tympanitic. I commenced the use of the veratrum, and its effects were so satisfactory that I used *no other medicine.* The disease ran its usual course (some three or four weeks' duration), but the patient remained quiet and comfortable unless the veratrum was omitted, in which case his pulse would rise, his face flush, his bowels become tender, and restlessness ensue. These would all subside, however, when the medicine was resumed. He recovered.

In other cases of the disease (of a less sthenic character), the effects of the medicine were indefinite.

I will mention one other case. Early in October I was called to consult with Drs. Abbot and Collier in the case of a negro girl, about 13 or 14 years of age. She had typhoid fever, and had been under treatment. A slight mercurial impression had been produced; her mouth was moist and some moisture on her skin; but there was still tenderness of the bowels with some tympanitis and copious thin evacuations, although these were slightly improved in appearance; pulse 140. The use of the veratrum was decided upon, and all other medicine discon-

tinued. Twelve hours elapsed before the circulation was brought under its influence, and the dose had been increased to 9 drops. When, however, it was fully controlled, she began to improve rapidly, and soon recovered.

I simply submit these cases without comment.

PROCEEDINGS OF THE COLLEGE OF PHYSICIANS AND SURGEONS, OF LOUISVILLE.

Reported by S. M. BEMISS, M.D., Secretary.

Fifth Meeting, October 12, 1858.

Dr. Sam'l B. Richardson reported a case of syphilitic caries of the cranial bones. The patient was a merchant by profession, and married—had gonorrhœa in early life. Five years ago had contracted syphilis, for which he had undergone the usual treatment. Mercurials had been carried to ptyalism. Notwithstanding this, secondary and tertiary symptoms resulted.

Last spring he had been brought under the attention of Dr. Richardson, who discovered a soft spot over the parietal bones, believed it to be an abscess, and directed poultices. He suffered much pain in the head and face, and required frequent opiates for its relief. In May he opened the abscess by a crucial incision, which afforded some relief from the pain. On the 8th of October he had removed the diseased bone. He performed the operation by a crucial incision over the diseased part, and cutting away the bone with Hays' saw, his patient being under the influence of chloroform. The removal of the diseased bone left the dura-mater exposed to view, which was covered with pus. No untoward symptoms followed. The patient had less pain, and was able to dispense with opium, which had previously been indispensable. This patient had also had for some time, ulceration of the throat and posterior nares. This had been treated with a solution of nitrate of of silver, locally applied. The portion of the bone removed, as exhibited, was one inch and a half across, and had rested *immediately over* the longitudinal sinus. He had no nodes, no rheumatic or nocturnal pains. He had been kept upon the use of Donovan's solution, succeeded by iron.

Dr. Flint. Have there been any cerebral symptoms?

Dr. Richardson. Pain in the head and obtuseness of intellect.

By the same. What indications directed the removal of the bone?

Dr. Richardson. The dead bone acted as a foreign body, and prevented the escape of pus from the surface of the dura-mater. The presence of carious bone should always be deprecated, and avoided when practicable, because it tends to keep up morbid action.

Dr. Miller. Had any bone been expelled prior to operation, there must have been some either expelled or absorbed, since there was a soft spot over cranium.

Dr. Richardson. Bone had come away.

Dr. Powell. Is it not always proper to remove carious bone in treatment of syphilis?

Dr. Richardson. Yes, when of much magnitude, and not detached spontaneously.

Dr. Rogers. What particular constitutional remedies did you most rely on in treatment of this case?

Dr. Richardson. Donovan's solution has been prescribed in five drop doses, thrice daily for forty consecutive days, then iodide potash, and lastly, iron; aperients and opium at various times, as indicated.

Dr. Miller suggested cod-liver oil and iron to build up the constitution.

Dr. J. Lawrence Smith. Is there no likelihood that the base of the cranium has shared in this diseased condition?

Dr. Richardson thought not.

Dr. Rogers. How is reparation of cranial bones effected? Does the opening, when once formed, diminish in size? If so, by what process?

Dr. Richardson. The opening does diminish by deposition of bony matter. The late Baron Larry had exhibited to him, at a social and professional interview at his apartments in the French metropolis, two crania of patients mentioned in his "Surgical Memoirs," who had lost very *considerable portions* of the brain and dura-mater along with the cranial bones. One of them was the result of a *sabre wound* inflicted in one of Napoleon's battles, in which nearly the entire parietal, and portions of the contiguous bones thereto, together with portions of the brain and dura-mater beneath, had been *sliced off smoothly.* The other resulted from *a fall from a height* upon the deck of a ship, the head striking and producing an extensive comminuted fracture of the cranium, with much loss of bone and brain resulting. Both of these men recovered. Twenty-eight and thirty-two years respectively thereafter, these subjects of the extensive injuries referred to, died, and the Baron's vigilance enabled him to secure their crania, and these were the identical specimens taken from his cabinet and exhibited on the occasion referred to. There were unmistakable evidences, upon the inspection of these bones, of the great extent and

precise limits of the original loss of structure to which they had been subject so many years before, as well as the almost complete closure of the osseous wounds. The reparative process had evidently commenced in the whole extent of the circumference of the *irregularly* circular wound, and progressed toward the centre, where but a *small* opening remained. The new bone *diminished* in thickness from the circumference toward the centre, and resembled in appearance the closure of an opening made in a sheet of ice in the process of subsequent re-freezing—thickest at the circumference and thinnest at the centre, until completely closed as before the fracture and opening were made. These cases suggested to the distinguished surgeon-in-chief of Napoleon's military campaigns, the idea and opinion which he advanced at the interview referred to, that not the integrity, nor the existence itself of the dura-mater, as had been supposed, was essential to the reparation of the lost superimposed osseous structure. This opinion he advocated verbally in the medical section of the Institute of France. He remarked, in conclusion, that "if his former patients *had lived a little longer*, the openings in their heads would have ceased to exist."

Dr. Miller. Do you know of any instance where considerable loss of substance of cranium has been followed by complete closure?

Dr. Richardson. I have seen them very much diminished; can not state that I have ever seen complete closure.

Dr. Miller. Dr. Dudley once performed an operation in which the orbital plate was removed, and the brain pulsated at this point during the remainder of life, or at least for as many years as he had any knowledge of the case.

Dr. Richardson. So far as my remembrance of the literature upon this subject goes, I can not now call up any case in which complete closure has resulted.

Dr. Miller. Is there any truth in the idea that a metallic plate may be inserted to protect the brain?

Dr. Flint. It is only a popular idea. A metallic plate is often placed over the opening exterior to the scalp, as a protection to the unshielded brain.

A member inquired of Dr. Flint if he had ever known an instance in which loss of cranial bone in children had been replaced?

Dr. Flint. I think I have.

Dr. J. Lawrence Smith. I have known an instance of complete reparation after such loss, and epilepsy followed.

Dr. Flint referred to a case where loss of cranial bone was fully replaced, and as an example of the singular effect injuries about the head sometimes manifested upon the intellect, he

cited the case of a gentleman who was regarded as stupid until he received fracture of the skull, with loss of cerebral substance; after which he had acquired extensive and deserved reputation as a gentleman of legal abilities.

Dr. Richardson related a case of a man who, at his wedding, received a blow with a shovel over the anterior parietal region, fracturing the skull, and occasioning the loss of two or three ounces of cerebral substance. The marriage ceremony was, nevertheless, performed. After the lapse of a week, the man became suddenly insensible. He was trepanned, and much bone removed. Complete recovery resulted. Several years afterward he was in health, and reported his intellect *stronger* than before the injury.

A member. Is cerebral matter re-produced?

Dr. Flint. It is.

Dr. Richardson. What is the experience of members with regard to recent improvements in treatment of epilepsy?

Dr. Miller has been disposed to place confidence in digitalis.

Dr. Rogers knows but one instance of recovery from epilepsy, and that was under the use of oxide of zinc. The patient had tried all other specifics.

Dr. Powell spoke of a case treated and supposed to have been cured by peony.

Dr. Rogers said that a case within his knowledge was reported to have been cured by accidental burning.

Dr. Wible advanced the opinion, that the very frequent failures in treatment of epilepsy, were sometimes due to the fact that physicians were not sufficiently mindful of the proper hygienic conditions of their patients.

Dr. Caldwell mentioned the case of a lady twenty-five years of age, who had, since childhood, suffered daily from pain in the top of her head. She had tried various forms of treatment, and had ultimately given up all remedies—is never free from pain, but sometimes suffered more than at others, although she is generally up and about.

Dr. Brandies suggested osteophytes as the cause of the pain.

M. Lobach says the seeds of the Carduus Mariæ have surprising efficacy in arresting uterine hemorrhage; not only checking the discharge at the time, but by continued use, preventing its return; and this in cases where krameria, sesquichloride of iron, phosphoric acid, tannin, &c., had failed; and especially operative where the floodings are associated with portal obstruction, diseases of the liver and spleen, hemorrhoids, &c. Used in the form of tincture or docoction.

Editorial Department.

A vigorous writer in one of our exchanges has appropriately remarked, in regard to the Convention of Teachers soon to meet in this city, "that whatever of discussion or deliberation may precede the final action of that body, must come through the medical press between now and the first of May; since the magnitude of the questions to be taken up, and the limitation of a single day to their consideration, inevitably determine that action, and not deliberation, decision, and not discussion, must be the province of the council, when assembled."

It is, in our estimation, a matter of the utmost importance that all who are to be members of this Convention should come prepared for prompt action, consequently both they and the constituents from whom their instructions are to emanate, should make themselves thoroughly conversant with every point likely to be brought under consideration by that body; so that, after due deliberation, they may be enabled more discreetly to choose their positions, and with more certainty to institute those measures which will tend to promote the best interests of the profession. If this course should be adopted by all members of this Convention prior to their assemblage, it will certainly save much needless debate, and be more likely to result in the attainment of the objects for which the council is convoked. That our readers may be fully informed in regard to the objects of this Convention, we extract such of the proceedings of the last National Association as refer to it:

Dr. James R. Wood, of New York, Chairman of the Special Committee on Medical Education, submitted his report, which was read, with the following resolutions:

Resolved, That the several medical colleges of the United States be requested to send delegates to a convention to be held at [Louisville], on the [second] day of [May, 1859], for the purpose of devising a uniform system of medical education.

Resolved, That the present report of the Special Committee on Medical Education, be referred to such convention for its consideration.

Resolved, That said convention of delegates from the several colleges of the United States be requested to submit to the meeting of this Association in May, 1859, the result of their deliberations.

On motion, the report was accepted and referred to the Committee on Publication, and the accompanying resolutions were laid on the table. * * * * *

On motion of Dr. Comegys, of Ohio, the resolutions submitted by the Special Committee on Medical Education, were taken from the table for consideration.

A long discussion ensued, upon a motion of Dr. Hamilton, of New York, to refer the resolutions to a committee, consisting of one member from each delegation representing a medical college, these members to be named by the college delegates present, and to report on Thursday morning at 10 o'clock.

The debate on the subject was terminated by the operation of the previous question, moved by Dr. Foster, of Tennessee, and the motion of Dr. Hamilton was agreed to. * * * *

Dr. Frank Hamilton, of New York, from the Committee of Delegates from Medical Colleges, to whom were referred the resolutions reported by the Special Committee on Medical Education, submitted the following report:

The Committee to whom were referred the resolutions appended to the report of the Special Committee on Medical Education, have adopted the following preamble and resolution:

Fully appreciating the value and importance of the resolution under which we have been appointed, but a majority of the gentlemen constituting this committee not being authorized by the medical faculties of the several colleges with which we are connected to act as their representatives in this matter, and moreover regarding it as quite impossible to secure a convention of delegates in the interim of the meetings of this Association: therefore—

Resolved, That we recommend to all the Medical Colleges entitled to a representation in this body, that they appoint delegates, especially instructed to represent them in a meeting to be held at Louisville, on Monday, the day immediately preceding the convention of the American Medical Association for the year 1859, at 10 o'clock in the morning, at such place as the Committee of Arrangements shall designate.

S. D. GROSS, *Chairman.*
FRANK H. HAMILTON, *Secretary.*

This report was accepted on motion of Dr. Kemp, of Maryland, and the preamble and resolution were adopted; and the Committee was instructed to meet in Louisville on the Monday preceding the session of 1859.

That discussion may be fully elicited, and the views of all

parties expressed, it is probably better for medical journalists to take the initiative in the utterance of opinions in regard to the best means of reform. Under this conviction, and with the previous avowal that we will give our adhesion to every projected change which, in our opinion, looks with certainty to the elevation of the standard of medical education in this country, we wish to advocate the adoption of certain measures which now occur to our minds as essential features in the proposed reforms.

Firstly: We regard it as important that the period of attendance upon lectures should be lengthened. We propose, to this end, that certificates of attendance upon three full courses, each of four months, and only one annually, shall be made a uniform requisite for graduation.

Medical schools may readily prove that, in the adoption of such a rule, they are not actuated by purposes of self-emolument, but only by an earnest desire that students should be better perfected in in all branches of the profession before being admitted to its honors, by admitting such students as have paid for two full courses, to the third without additional charge for fees.

Secondly: We strongly urge the repeal of that rule under which some schools have regarded a term of years engagement in practice as equivalent to a full course of lectures. That this measure has been an important aid to many deserving practitioners, we doubt not; but at the same time, we do not hesitate to express a conviction that its general working has been to hold out an inducement to students to commence the practice of medicine without adequate preparation, so as to obtain the benefit of this clause.

Thirdly: In the feelings of rivalry which have prevailed between medical schools, some faults have been introduced into the beneficiary system. We recommend medical schools to instruct their representatives to institute careful scrutiny into the workings of this system, to ascertain if the abatement of certain features now practiced, would not be promotive of the interests and success of medical teaching and of the profession generally.

Fourthly: As this convention of Teachers is assembled in obedience to a call from the whole profession through their

representatives in the General Association, they should, after having answered the expectations of the profession by adopting some positive measures of reform, move the National Association to support their efforts to elevate the standard of medical education, by recommending physicians not to admit students to their offices whose primary education is deficient, and to give closer personal supervision to the course of study of those whom they consider as proper to be admitted.

We leave these propositions to the reflection of our readers. We doubt not they will be received as they are offered—as a manifestation of an earnest intention to join in every measure of genuine reform. Although we entertain them now as propositions the most conducive to the ends to be attained of all others occurring to our minds, we shall not hesitate to abandon them for the support of those which may hereafter strike us as being preferable, from whatever source derived.

We trust every delegate to this Convention will come animated by a similar feeling, and that some reformative measures may be instituted in which the Convention will unanimously concur, since it is manifest to all, that reforms in medical teaching, especially such as make increased requirements upon students, will be almost totally valueless, unless universally adopted.

We can not close this editorial without reminding the lay members of our profession that the ultimate settlement of all these questions depends greatly upon them. This council of Teachers, they will bear in mind, is but a committee appointed by the National Association, and the results of their deliberations will be submitted to the general association as the report of a committee, and adopted or rejected, as that body may deem proper: consequently, it is an occasion upon which we invoke the attendance of the laity of the profession. The different medical schools might have cause for different methods of thinking and acting, but with the lay members of the profession there can be no personal interests to give them a bias. They will feel concerned for the welfare of the profession alone, and to them we are willing to entrust the final decision of all perplexing questions in regard to the best means of effecting reform. We trust they will turn out in their full strength, so that their influence may be paramount: in which event, we have full hopes that much good may be effected.

On the Treatment of Sprain by Friction and Shampooing. By M. Girard. (Moniteur des Hopitaux, No. 140.)—In this paper, laid before the "Academie de Medecine," M. Girard states that his attention was first directed to the plan of treatment he describes by the manipulations of an empiric. So successful were these in a bad case of sprain, that he determined to investigate the subject, and as the result of numerous trials, he now proposes what he believes to be a very effectual and a rapid procedure, for the treatment of what too often proves a very tedious and serious affection.

No matter what the severity of the sprain may be, its treatment should be commenced by the gentlest friction, the points of the fingers scarcely touching the skin. After practicing such frictions from below upwards for ten to twenty minutes, it will be almost always found that a certain amount of pressure can be borne, and this is to be increased or diminished according to the sensations of the patient.

It is very rare that we can proceed in this manner for half an hour without the patient declaring that his pain is notably relieved. Arrived at this point, when the patient can bear the weight of the hand, we proceed to the shampooing. This is performed not only with the fingers (which are kept close together during the frictions, are now to be separated, so as to pass into the various sinuosities of the part), but also with the palm of the hand, so as to embrace the entire joint and surrounding parts. The hand in both this and the former part of the procedure should be smeared with some fatty body, such as almond oil, so as to render its movements more soft and easy. The shampooing must be performed in the gentlest manner, without shocks, directed from below upwards, and acting not only on the painful points, but upon all those that are tumefied.

If pain is excited by an attempt at moving the joint, we must return to shampooing until new trials have proved that flexion and extension cease to excite painful sensations. Such movements would be very painful, or even dangerous, if performed at an early stage of the treatment. They do not, however, constitute any part of the treatment itself, and are only resorted to as a means of appreciating the results derived from shampooing. In several cases in which the cure had been considered as complete, the pains have returned next day, accompanied by more or less febrile reaction. A single re-application of the shampooing has sufficed to dissipate them, and in most cases, twenty-four hours' rest and the application of a bandage moistened with spirit of camphor, has sufficed for this. This bandage, indeed, is useful in all cases, and should be worn for two or three days.

This procedure is applicable to both old and recent sprains,

and even when there has been present also a fracture of the fibula, shampooing has effected a remarkable diminution of pain and swelling, enabling the surgeon sooner to ascertain the exact nature of the case. Several cases of severe, recent, and old sprains are referred to, in which two or three hours of this shampooing process have effected an entire cure.

On the employment of Oil of Turpentine and Opium in Large Doses in the Treatment of severe Puerperal Diseases. By Dr. E. Bonfils. (Bulletin General de Therapeutique, May 30, 1858.)—M. Trousseau has lately employed, with considerable success, a method of treatment, proposed originally by Dr. Graves, in puerperal diseases. This treatment consists in giving opium and oil of turpentine in large doses to women in child-bed who are attacked with metro-ovaritis, peritonitis, uterine phlebitis, &c. Among other cases, M. Trousseau has treated in this manner, and with success, a woman attacked with peritonitis and double pleuro-pneumonia. He also employed this plan in another case of a woman attacked with general and very severe peritonitis, which was very rapidly checked and afterwards cured; but although the cure appeared to be permanent, the patient was unfortunately seized with hectic symptoms of an insidious character, and sunk under what appeared to be a putrid infection. In the first case the opium was prescribed in pills and the turpentine in injection. At first five centigrammes (about one grain) of opium were given in five pills, to be taken daily; then the dose was gradually augmented till it reached about two grains a-day. The opium was continued for thirteen days. The turpentine was administered at first in the dose of ten grammes (about two drachms and a half) in two glysters, one in the morning and the other in the evening; then the quantity was progressively augmented to thirty grammes (about seven drachms and a half). In the second case the opium was also given in pills, in the dose of five centigrammes (about one grain) for three days. The oil of turpentine was administered by the mouth in capsules, each containing one gramme (about the fourth of a drachm) of turpentine; six of these capsules were taken every day, and they were continued for six days.

M. Berard, Professor of Physiology at the Faculty of Medicine of Paris, has recently died of apoplexy. On account of illness, he had not lectured for three years, although he pursued his physiological investigations.

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REPORT ON STATISTICS OF HERNIA, WITH A NEW OPERATION FOR THE RADICAL CURE OF UMBILICAL HERNIA—ILLUSTRATED WITH A CASE.

By SAMUEL B. RICHARDSON, M.D., of Louisville, Ky.

(Concluded from page 139.)

STRANGULATED HERNIA.—If reducible hernia, unreduced, gives rise as we observe every day, to so formidable an array of physical evils, and mental disquietude, greatly impairing the energies and usefulness of the unfortunate subjects of it, and exposing them to sudden and dangerous illness, these are greatly increased when it becomes *strangulated*, ending, as it does unrelieved, speedily, in inevitable death. It may be, not unaptly, likened to the *grasp* of some insatiable reptile, coiling himself about the vitals of his victim, with increased and constantly accelerating power; and, if not promptly broken by a skillful and unerring blow, must very soon place the unhappy sufferer beyond the reach of all remedies.

Touching the proportion of strangulated, to the whole number of hernia cases, and also, that of recoveries after decided strangulation has occurred, our statistics are necessarily almost as defective as we found them, in regard to the per centage of hernia cases in the whole population. From not a little observation, reading, and inquiry, on this particular point, in this State and out of it, in Europe as well as America, I feel warranted in saying, that whilst a considerable majority of strangulated cases that occur under the observation and treatment of intelligent physicians and surgeons, are reduced, I am equally sure, that of those operated upon, a considerable majority terminate fatally.

In view of so heavy mortality following a particular opera-

tion in surgery, the reason therefor is very naturally asked, and is a legitimate subject for our investigation. Is such a result the *necessary* issue of the operation for strangulated hernia, when properly executed? Is this operation *per se* attended with greater hazard to life than cystotomy and several other operations with which the profession is familiar? I apprehend not. A satisfactory solution of the fact must be found in some other cause or causes than that alluded to. The large per centage of fatal cases following operations for strangulated hernia, heretofore, I believe to be attributable to, *first*, delays on the part of the patients or their friends in calling for medical or surgical assistance; *secondly*, *too forcible and protracted* use of the taxis, and prostration of the vital energies by medication and the depletory means employed; *thirdly*, and more especially, the *delay* in performing the operation after it *should be known* that nothing else can avail. I have often concluded from their course of practice, that professional men attributed greater hazard to the operation than the disease. I do not know that any *precise time* can be fixed as that which may be safely employed in efforts at reduction, before resorting to the operation. In the determination of this question, I do not believe that anomalous, rare, and *unusual* cases of spontaneous return of the contents of the sac should be considered. I am utterly opposed from experience, to the rule of the late distinguished Baron Dupuytren, to delay the operation for twelve hours after reduction has proved impracticable, as well as to his reasons for the rule, viz: That nature is *occasionally* capable of overcoming the difficulty—and that *an occasional life* had better be *sacrificed*, than operate where recovery *might have occurred without it.* Far be it from me to counsel or advocate undue and inconsiderate haste in making this or any other surgical operation. I will, however, take this occasion to express my clear conviction that from three to five hours *properly occupied* in efforts at reduction, when the symptoms are urgent, is as long a time as we are warranted in consuming fruitlessly, before resorting to the operation. After sufficient time has elapsed for a prompt and conditional employment of chloroform—the hot bath—bleeding from the arm (pleno rivo ad deliquium), if the subject is in full health—nauseants—and ice cap to the tumor (excluding the use of tobacco)—and the

judicous use of the taxis from time to time—all of which may generally be accomplished within the period I have named—*further delay is far more hazardous than the operation.* Indeed, I do not regard the operation in itself attended with much danger to life. The results of inflammatory action as found in all *fatal* cases, are sufficient to account for the fatal termination, independent of the legitimate use of the knife.

For the past fifteen years, I have been, as far as practicable, guided by the foregoing views, and in the main, see no reason to regret it. The following cases are appended in point. A brief summary and analysis of these cases was furnished to the Committee on Surgery, for 1852, and may be found referred to in their printed report.

Case I.—Large scrotal hernia of the left side—sac contained six inches of the colon—operation thirty hours after strangulation—recovery.

J. H., of Lexington, Ky.—grocer; æt. about forty years, bachelor—a large muscular man of full habit, has used ardent spirits habitually for some time. Has had a large, reducible, inguinal and scrotal hernia for many years, and has worn his truss *irregularly.* Strangulation followed severe muscular effort in lifting a heavy barrel into his store. He vainly attempted to reduce it, by the taxis for twenty-four hours, when I was urgently called to see him. From before breakfast, until noon, I employed, in connection with the taxis, the hot bath—with free bleeding from the arm—injection into the bowels—external application of moist tobacco to the scrotal tumor—without avail. I then ordered a full dose of tinct: opii, and left him for two and a half hours, when I was joined in consultation by the late Prof. W. H. Richardson, and Dr. Theobalds, then of Lexington, now of Mississippi. It was decided to operate without further delay; and after the proper and brief preliminary preparations, I proceeded to perform the usual operation. The tumor was large, and the external incision corresponded, reaching from an inch above the external ring, over the most prominent portion of the tumor, a length of about six inches. About two ounces of reddish serum escaped on opening the sac, which contained about six inches of the *sigmoid flexure* of the colon, very much distended, and of a reddish brown color. The point of stricture was reached with difficulty, on account

of the great distension and forcible escape of the bowel from the opened sac. The stricture was at the *external* ring, and neck of the sac, and both were divided. The intestine could not be safely reduced until several inches more of it were *withdrawn*, and a part of its gaseous contents pressed up. It was then all safely reduced, and the wound accurately closed. This united mostly by adhesion, and the patient had a speedy recovery. He wore a truss for some months after the operation, I know not how long.

Case II.—The following is copied from the notes of the case, made by Dr. Jno. C. Richardson, of Lexington, Ky., whose patient the lady was:

Strangulated inguinal hernia—female—complicated with prolapsus uteri and hemorrhoidal tumors. Mrs. G. C., shortly after a heavy lift in removing, or assisting to remove, a large iron vessel in her kitchen, was suddenly seized with violent pain in the *right* groin and labia pudendi. I saw her without delay, and made efforts unavailingly to reduce the hernia for a period of six hours, during which time, free bleeding, nauseants, and other relaxives usually employed under like circumstances, were successively used in addition to the taxis. I was then joined by Dr. S. B. Richardson, of Louisville, Ky., then in the vicinity, when it was agreed to operate without further delay. The operation was made by him at my request, which was followed by immediate relief to the patient. Extensive effusion, and coagulated blood and lymph in the sac.

9th.—Patient doing well.

10th.—Dressed the wound, and excised the hemorrhoidal tumor.

11th.—Dressed wounds—doing well—so on to the 25th, when she was upon her feet improperly.

On the 27th, I opened a large abscess of the right labium, same side of the hernia. The wound was dressed for some days, when she was discharged cured.

Case III.—Oblique inguinal hernia, left side—operation twenty hours after strangulation—contents of sac, omentum and small bowel.

L. C., beef butcher, æt. about thirty years, has had reducible oblique inguinal hernia of several years duration, unsupported by any retentive means. He was on horseback, driving wild

cattle, Oct. 28th and 29th, 1843, and his hernia became strangulated in the afternoon of the latter day. The patient made protracted and severe unsuccessful efforts at reduction, until 3 o'clock, A. M., of the 30th, when I first saw him. The hernial tumor and abdomen were tense and painful; stomach irritable; bowels costive, and a constant desire to evacuate them, with general restlessness and anxiety. Two hours and three quarters were then employed in unavailing efforts at reduction, during which, bleeding from the arm, the hot bath, cold to the hernial tumor, posture, and the taxis were used. From the rough handling and protracted pressure of the hernial tumor by the patient, it was too sensitive to admit of much additional use of the taxis. A full dose of opium was given; cold continued to the tumor; and the patient left until $10\frac{1}{2}$ o'clock, A. M., when I was joined by a number of professional gentlemen, and finding no amelioration of the symptoms, the operation was at once performed, assisted by Dr. W. H. Donne. The contents of the sac were found to consist of some dark colored serum, a portion of omentum, and a small knuckle of the small intestine, presenting a very dark brownish red color, *firmly* strictured at the external ring. This stricture was divided, by making several short incisions in the anterior half inch of the circumference of the ring, and the contents of the sac reduced. The lips of the wound were approximated and retained by several sutures, adhesives, roller, &c., and united mostly by adhesion; a rapid recovery ensued, and on the 25th November following, say twenty-five days, I fitted this patient with a truss at my office, when the external ring and neck of the sac appeared to be obliterated.

Case IV.—Strangulated femoral hernia; right side; female; operation twenty-nine hours after incarceration; intestine only involved; recovery.

Mrs. H., a highly respectable lady of this city, Louisville, Ky., æt. about thirty-five years; has observed occasionally for several years, a small tumor at the upper front part of the right thigh, which she was enabled by pressure to make disappear when in a recumbent position.

Dec. 2, 1845, I was requested to see her, and found that she had strangulated femoral hernia of right side, of twenty-six hours' duration, and at about six and a half months of utero-

gestation. She had been attended for her attack by homœopathic physicians, who I learned, had first treated her with homœopathic powders, and then dosed her with castor oil. Failing to reduce the hernia by the best known measures employed for a period of three hours, and the symptoms being urgent, I did not consider it safe or proper to permit her longer to remain in torment and danger, and operated without further delay. On opening the sac, a short fold of small intestine was found very *firmly* strictured at the femoral ring. The stricture was divided with the hernial knife of Sir Astley Cooper, which I always use, and the very livid, but non-sphacelated intestine returned into the abdomen, to the perfect relief of the patient. She had a good recovery, without a single untoward symptom; and in about four weeks was fitted with a good retentive truss. I subsequently learned that this lady passed through her accouchment with safety, and had a living child.

Case V.—Large non-reducible, scrotal hernia of many years duration; right side; sac occupied with adherent omentum; operation seventy-two hours after strangulation: death eleven days thereafter.

H. R., grocer, of this city, (Louisville, Ky.), æt. about fifty years; had a large unreducible hernia of the right side for many years. Once or twice, he said it had given him much pain and made him very sick for several hours. Evening and night of Aug. 3, 1847, I was requested to visit him, and found him with symptoms of strangulated scrotal hernia of right side, which had come on about sixty hours before, and had been growing worse ever since. The tensity and sensibility of the hernial tumor and abdomen were less than usual under like circumstances, which, in the connection with the history of the case, was calculated to favor the opinion of adhesion of the contents of the sac. The usual relaxives were used during the remainder of that night, without mitigation of the symptoms, and I operated the next morning, the 4th, in the presence of a number of professional gentlemen, all but one of whom concurred in the necessity of the measure. On opening the sac, it was found almost exclusively filled with adherent omentum; a little serum escaped. A firm stricture was found at the *external ring and neck of the sac*, and divided. The strictured omentum, although not absolutely gangrenous, was livid, swol-

len, and almost universally attached to the walls of the sac. The lips of the external wound were drawn in apposition, and maintained over the protruding omentum, and lightly dressed. The second day after the operation, *erysipelas* made its appearance in and about the wound, and symptoms of peritonitis which had existed before the operation, became now very decided. These were combatted by all authorized activity, by depletory and other agents, with manifest amelioration for a few days, but the inflammation recurred, and the patient died August 15th, eleven days after the operation. An autopsy was made twenty hours after death, and the following brief notes of the morbid appearances were made at the time, by my lamented friend and relative, the late Dr. Jno. Richardson Buck, who kindly assisted me on the occasion:

"Wound from the operation ununited; great obesity of abdominal parietes and omentum; that portion of the omentum which had been strangulated, adherent to the parietes adjacent to the ring, greatly discolored, and gangrenous; the portion of intestines immediately in contact with the ring, adheres to the abdominal walls, greatly discolored, evidencing inflammation in the ileum and colon adjacent; peritoneum around the ring greatly discolored, but not gangrenous; adherence of the meso colon to the abdominal walls on the left of the ring; muco-purulent matter in the pelvic cavity; also about ʒss of serum."

Case VI.—Strangulated, unreducible, scrotal hernia of right side; entero-epiplocele; operation eighteen hours after strangulation; recovery.

J. R., æt. seventeen years; butcher's apprentice; son of Case V; rather slender form; has had reducible, becoming unreducible, inguinal hernia on the right side for several years, and has worn a truss at times, retaining his hernia imperfectly. September 9th, 1851, in the afternoon, he was seized with violent pain in the right groin, extending over the abdomen, whilst he was making severe muscular efforts in driving and running after stock. I was called to see him the following night, and found him with the prominent symptoms of strangulated hernia; and upon examination found the hernia incarcerated. I remained with him three and a half hours, employing the taxis, hot bath, nauseants, and ice to the hernial tumor, without benefit. I had then no intimation that this

hernia had not been reducible. I ordered the ice to be applied at intervals during the remainder of the night, until my visit next morning.

Sept. 10th.—Was joined at morning visit by Dr. Jno. Hardin, Dr. Guthrie, and others, and finding no amelioration or change in the condition of the patient, with their concurrence, proceeded to operate without further delay; first anaesthetising the patient by inhalation of chloroform. On opening the hernial sac some limpid serum escaped, and the sac was found to contain a large portion of partly adherent omentum, by the side of which, and both firmly strictured, was a fold of small intestine, which doubtlessly descended, and became strangulated during his severe bodily efforts the previous afternoon. The stricture proved to be at the internal ring, where it was divided from within the sac; the relieved bowel, although very dark was in a condition to be returned, but a temporary ligature was drawn firmly around the projecting omentum, just where it emerged from the external ring, and amputation was performed just external to the ligature. The amputated portion of omentum was then dissected from its attachments to the sac, and removed in irregular form of say two by three inches. In about ten minutes the omental stump ceased bleeding, the ligature having been previously slackened, and then removed. The wound was dressed with sutures, adhesives, &c., in the usual manner. The operation was followed by perfect relief, and nothing occurred to mar this youth's rapid convalescence, except an insusceptibility to the action of purgatives. On the 30th, twenty-one days after the operation, he came to my office and was fitted with a truss. At that time, the rings and canal appeared to be closed, perhaps, thereby, resulting in the *radical* cure of his hernia. The stump of omentum probably became attached to the sac, thereby becoming retentive.

Case VII.—Strangulated umbilical hernia in a female; large sac; fatal.

November 11th, 1847, I was called to see a negro woman, I., belonging to Mr. S., of Louisville. I had attended her two years before, for subacute and chronic peritonitis to which she had been subject for many years, and connected with the presence of the enlarged ovaria, distending the abdomen per-

manently. These tumors made their appearance some twenty years before—had gradually grown to present size, say six or eight inches in diameter, lobulated and very movable, rising often as high as the umbilicus. Her age is about forty-five years; has served in the capacity of cook; and says these tumors have always been sensitive, and extremely so, after a hard day's work, and during catamenial periods. She informed me, that on this occasion, she had suffered as before with severe pain for a week past, through the abdomen, and especially in "the lumps," as she called the tumors. I examined the abdomen through her under-wear, and found the tumors as before, irregularly distending its walls, and so sensitive as not to admit the weight of the bed clothes. Local depletion, by leeching, over the abdomen, to a moderate extent, was ordered, and opiates internally. The circulation was very feeble, and nervous energy too exhausted to allow much depletion. She lingered in great suffering, and died on the 15th, four days afterwards.

Post Mortem Appearances.—Assisted by Dr. J. R. Buck, the contents of the abdomen and pelvis were examined twelve hours after death. The existence of previous chronic sub-acute and recent acute inflammation of nearly all the serous surfaces, effusions, and purulent collections. Two ovarian tumors connected by long attachments with the broad ligaments of the uterus were found. One of these tumors, the smallest, say five inches in diameter, constitued *a part of the contents of a large umbilical hernia*, into which it was about half insinuated; the neck of the sac being nearly as large in diameter as any other portion of it. Small intestine was found also with the tumor as part of the hernial contents. The contents of the sac were easily withdrawn, and did not evidence a particularly firm stricture.

Observations.—This case is peculiar in the size of the hernial sac, as well as the nature, in part, of its contents. The prime cause of the hernia was the great distension of the abdomen by the ovarian tumors, no doubt one of which, gradually insinuating itself by the heavy pressure behind, into the gradually yielding umbilicus, gave form and size to the hernial sac—a sac almost without a neck. If earlier aid had been solicited in her last illness, and the true nature of the case ascertained,

if that were possible, it is very doubtful whether the symptoms could have been mitigated, and the fatal termination prevented or deferred. It is very apparent that I failed to diagnosticate the case, and that only the scalpel revealed the true condition.

In prosecuting the work assigned me, I addressed in the form of a circular, a number of questions on the subject of hernia, to the members of the profession, in and out of this State, best calculated, as I supposed, to elicit all attainable information. This I had published primarily in four of our principal newspapers having *large* circulation in this State or elsewhere, which I have reason to suppose was copied into other prints. In addition, I wrote a number of letters to distinguished members of the profession, located in different parts of the State, asking their particular attention to the subject of my circular, besides making (in some instances repeated) application, to several of the principal surgeons and physicians of Louisville, in person, to the same effect—to all of which, I have been favored with but seven responses to this time. A summary of the information obtained from this source, is now presented in the order in which it was obtained, with the contributors, to whom respectively, I return my thankful acknowledgments:

Dr. John Swain, of Ballardsville, Ky., says, he has had two cases under treatment for radical cure within the past twelve months—supposes as approximative, that 1 of 335 of the population of his region, are subjects of hernia. Finds inguinal hernia most frequent; and regards the steel spring truss, with ivory or wood compress, as the best means of retention, as well as for effecting a radical cure. Does not *know* that he ever effected a radical cure; *supposed* he had in one instance with solid ivory pad and spring truss. His patient wore the instrument more than a year, and threw it aside in 1841; and had no return of the hernia until the spring of 1853, a period of twelve years, and is now under his treatment again. I think it is fair to infer that this case *had been cured.*

Dr. R. W. Chew, of Midway, Ky., has treated eight cases of hernia—seven black, and one white—seven were scrotal, and one umbilical. Four were strangulated, and all were reduced in from four to twelve hours, by bleeding while in the warm bath, nauseants, and constant employment of the taxis

during the relaxation. Has effected a *radical cure* in one case, a negro boy, aged fifteen years, by the use of Stagner's truss, by which we infer the wooden pad truss. Has now one case of double reducible hernia (species not named) under treatment. It was produced suddenly, in a subject forty years old, with lax fibre, by jumping. Openings large; no benefit from two years' treatment. His case of umbilical hernia was a child two months old. The bowel was returned by continuous gentle pressure, and a truss adjusted. The case terminated fatally in about two weeks, with symptoms of peritonitis. Does not know how many cures have followed his treatment, as most of his patients were slaves, and have changed owners, and passed beyond his observation. Cannot form an opinion of the relative proportion of the population who have hernia.

Dr. W. L. Sutton, Georgetown, Ky., thinks he has treated in all, not exceeding a dozen cases of hernia, mostly children, and successfully, by retentive trusses alone. Cannot say how many cases he has seen, nor has he any idea of the proportion of hernia cases to the whole population, but thinks it is *small;* scrotal most common species seen; has seen primarily and in consultation, six cases of strangulated hernia, in *two* of which reduction was accomplished without resort to the knife *One* a child of one year, died without an operation. One adult, in which the operation had been *postponed* until the patient was *in articulo mortis.* One case, adult male, died without relief of the stricture, being *femoral hernia* of right side—an autopsy revealed a small omentocele with recent adhesions to the sac; stricture at inner edge of Gimbernat's ligament; evidences of acute peritonitis; death twelve days after first symptoms of strangulation. And one, the sixth case, femoral hernia—female, æt. fifty years—right side; enterocele of twenty-five or thirty years' duration; reducible; strangulated a week before operation; contents of sac gangrenous; stricture divided from *within the bowel;* recovery after temporary artificial anus; *patient did not inform the attendant of tumors of groin.* For reports of two of these cases, being unusual, see Am. Journal Med. Science, vol. 10, new series, pp. 251, 254.

Dr. J. M. Bush, of Lexington, Ky., reports having had primarily and seen in consultation within the last ten years, thirteen cases of strangulated hernia, upon four of which opera-

tions were performed; three male adults; all inguinal; the first æt. thirty; of three days' standing; involving colon and twelve inches of ileum; fatal on fonrth day. Second case, male, æt. sixty-five years—had hernia of left side fifty years; enterocele, incipient mortification of contents of hernial sac at time of operation; death in forty-eight hours. Third case a negro, æt. thirty—tumor very much distended; strangulated four days; left side; died half an hour after operation; small bowel involved. Fourth case, Sept. 1853; female, æt. forty—right femoral; had hernia four years: was treated for colic four days, she concealing existence of hernial tumor; enterocele; tympanitis; operation; recovery. Eight cases besides, relieved by the taxis—four with great difficulty.

Dr. J. B. Flint, of Louisville, Ky., has notes of nine cases of strangulated hernial operations; six recovered, and three died. Has had four additional cases, of which he has not preserved notes—but about the same ratio of recoveries occurred. Has had one case of *femoral* hernia in a *male* subject. Used opium *freely* in strangulated hernia before the introduction of modern anesthetics, with great advantage in facilitating reduction and considers that these cases justify, beyond doubt, ætherial anaesthesia. He has performed none of the operations proposed for *radical* cure of hernia—regards them as opposed to the canons of sound surgery, and not to be compared to a well-adjusted retentive truss.

Dr. J. C. Metcalfe, of Louisville, Ky., has operated twice for strangulated hernia. First case, a German laboring woman, aged sixty. Femoral hernia of left side, of three months' standing. Saw patient thirty-six hours after strangulation, and operated about fourteen hours later, say fifty hours in all. Enterocele—stricture divided after opening sac. Speedy recovery. Second case.—A male aged forty-seven, native of Ireland; stone-mason. Had had oblique inguinal hernia of right side three years—strangulated ten hours. Taxis employed perseveringly, and operated without delay. Efforts to reduce the contents of the sac without opening it, failed. The stricture consisted of false membrane near the neck of the sac, which was divided. Cure permanent. Neither had used retentive means.

Dr. John Hardin, of Louisville, Ky., does not recollect the

number of his strangulated cases. Generally relieved by bloodletting, warm bath, nauseants, and taxis, if plethoric; and the free use of opium in the feeble and anæmic. Would use chloroform in all cases now, as a relaxive, if nothing to contraindicate. Has used the knife in three cases—two proved fatal, and one recovered, as follows, viz: First case.—Negro, male adult—produced by strain in lifting. Tumor size of almond; small enterocele of left side, protruding through internal abdominal ring only. Operation fourth day after strangulation, when patient was nearly moribund; strangulated bowel, dark red color; was returned. Death forty-eight hours after operation. Thinks an early operation would have resulted in restoration. Second case.—Old negro man; chronic; right scrotal, as large as two fists. Had been often strangulated and reduced by patient. Strangulation twenty-four hours when first seen. He appeared moribund. Taxis was tried before operation. Sac and contents (small intestine) gangrenous. Death two hours after operation. Third case.—Negro boy, eight years old. Congenital hernia on right side enterocele. Has been strangulated several times. Ordinary means of reduction were first employed, to which was added injection of tobacco infusion into the bowel. This produced alarming sinking, and did no good. Operated after reaction, and eight hours from commencement of strangulation. Recovery. Well in eight days. Two years afterwards, the cure appeared to be radical.

Dr. Jno. C. Richardson, of Lexington, Ky., says he has been repeatedly called in consultation to operate in strangulated hernia, but declined, finding the patients moribund. Has had two cases of strangulated hernia, species of one not remembered; the other, right scrotal, in which, after failing to reduce by ordinary relaxives, the contents of the sac returned spontaneously after commencing the operation, and the preliminary incisions were extended to the sac. One other case of strangulation in a boy six years old—left inguinal—in which he was overruled by the entreaties of the mother after he had determined to operate. A delay ensued in consequence, of fourteen hours, during which tobacco poultices were applied over the hernial tumor, and spontaneous reduction followed at that period. Thinks the tobacco was instrumental in the

reduction, but came very near killing the patient. Believed for some hours that he would die from the effects of it. He believes hernia to be a common affection, more so than is generally apprehended; and that more than one in fifty of the population are subjects of it. Some of his reasons for this impression are, the disinclination of a large majority of both sexes to disclose their infirmity, and who often ignorantly fail to recognize it in their own cases, where he has found it to exist. He has cured, radically, several cases of hernia in young children by simple compress and bandage.

Of the preceding cases of strangulated hernia—communicated by eight gentlemen—upon whom operations were made amounting in all to twenty-two, ten died, almost one-half. Including those that died without operation, the number is twenty-nine, of whom sixteen died, being a small majority. Adding to this list my own cases—seven in number, six operated upon, and two died—we have a total of thirty-six cases, twenty-one of whom recovered. Excluding the cases, eight in all, in which, for reasons stated, the operation was not made, we have twenty-eight operations and fifteen recoveries, rather more than half.

Since the foregoing was written, I have been furnished by Dr. M. Goldsmith, twelve additional cases of *strangulated hernia*, which came under his observation, and in which he divided the stricture with the knife—ten of whom recovered, and two died, being a large per centage of recoveries. Adding these to the preceding, we have forty cases of strangulated hernia operated upon, and twenty-five recoveries. Dr. G. adds, "I never yet had occasion to regret operating too early. I believe as firmly as I believe any thing, that the fatality of the operation for strangulated hernia is due more to delay that precedes it, than to the operation itself."

Again, the question recurs as to the cause of the great mortality in hernial operations, as indicated by the foregoing facts. We have already seen that it can not be from the operation in itself considered, but is referable to other causes, some of which are under the control of the profession. The operation for hernia is unquestionably to be ranked among the capital operations of surgery, requiring for its safe execution an accurate acquaintance with not only the healthy anatomy of the rather

complex structures involved, but also of the modifications impressed thereon by those morbid changes to which they are subject. I suppose I may safely say that doubt in the mind of the physician as to his possession of this knowledge, whether correct or not, has in some instances caused delay in operating, or the entire abandonment of the patient to his fate.

Hernia, when strangulated, admits of no delay. If not reduced by appropriate medication, taxis, &c., in a few hours, the patient dies, almost inevitably, unless the stricture is divided with the knife. There is no time, as in vesical calculus, aneurismal and other tumors, as well as numerous chronic cases requiring operations of more or less importance, to send (perhaps a distance) for, or transport the patient to, the operative surgeon. It therefore behooves every physician, if not already master of the subject, and every student of medicine, to study the whole matter with the greatest zeal and assiduity, and never to relax his efforts to acquire a knowledge of the anatomy, healthy and morbid, of hernia, scalpel in hand, until he has fully mastered it. Private preceptors, as well as teachers in our medical schools, should not only counsel, but *demand* this knowledge of every student, and especially of every candidate for the degree of M.D.

I am satisfied that our public teachers of anatomy, surgery, pathology, and other branches of medicine, have it in their power to accomplish much in this matter, by making an acquaintance with the subject a sine qua non to graduation.

It has been said of a distinguished teacher of medicine and surgery, in this country — the late Dr. Physick — that he never failed to interrogate students, "in the green room," on the anatomy and surgery of hernia, and that he invariably rejected them if deficient in their knowledge of this subject.

Sick Headache. — Dr. J. C. Norton, of Homer, Minnesota, in a report on the botany of Winona county, says of the cicuta: "In small doses, it is, according to my experience, a sure cure for nervous sick headache."

Yellow Fever. — Dr. Fenner reports, that he has used both chlorine and veratrum viride in yellow fever, with much success. The terrible mortality of the late epidemic, furnishes a most telling commentary on this statement, however.

EASTERN LUNATIC ASYLUM,
February 26, 1859.

DR. S. M. BEMISS:

Dear Sir,—In your favor of the 23d inst., you ask if I have observed any "increased tendency to death by *gangrene* of the lungs among the insane."* I have not, nor have I ever witnessed a case of gangrene of the lungs among the insane. The records of this Institution do not show a single death from that cause, and I presume none has ever occurred. It is scarcely possible that such a case could have passed unobserved, or could have been mistaken for any other form of disease. Gangrene of the lungs presents such unmistakable phenomena—so distinct and characteristic—that an error in diagnosis is infinitely improbable.

From the 1st day of January, 1849, to the 31st day of December, 1858, a period of ten years, 405 persons died in this Institution. The following table exhibits the causes of death, as appears by the Asylum records:

Cholera	139	Traumatic Gangrene	1
Fever, sequence of Cholera	12	Marasmus	5
Dysentery, " "	4	Exhaustion	18
Measles	2	Suicide	1
Epilepsy	70	Paralysis General	4
Chronic Diarrhœa	49	Hemorrhagic Exhaustion	3
Consumption	39	Frost Bite	2
Dysentery	8	Maniacal Exhaustion	10
Old Age	11	Ossification of the Heart	1
Apoplexy	4	Chorea	1
Gastro-enteritis	3	Bed Sores	1
Gastritis	1	Acute Mania	1
Typhoid Fever	2	Hemiphlegia	1
Accident	3	Inflammation of Brain	2
Pneumonia	1		

Of this large number, 155 died, directly or indirectly, of cholera, and we might, perhaps, add others from the 28 who are reported as perishing of chronic diarrhœa in 1850. Cholera prevailed in this Institution in 1849, '50, and '55.

Diarrhœa formerly prevailed at every season of the year, and hurried the end of many who were not reported as having died of that malady, but no case has occurred since the spring of 1856. Exemption from this troublesome and often fatal disease, is attributed to a change of water for ordinary purposes. The spring previously supplying the Institution was abandoned, and another source opened by deep boring. Diarr-

* The inquiry was suggested by an opinion expressed by a member of the College of Physicians and Surgeons.

hœa, then rife in the house, ceased at once, and has not again appeared.

If you will designate any statistics that you desire, I will be pleased to furnish them, as far as our records will enable me to do so. Yours, truly,

W. S. CHIPLEY.

GLASGOW, Ky., March, 1859.

Messrs. BEMISS & BENSON:

If the following item of Obstetrical incident shall be thought to possess sufficient interest, from its rare nature, to entitle it to a place of record in your valuable journal, it is herewith submitted.

At 12 o'clock on the night of March 4th, I arrived at the residence of Mr. S—— E——, three miles from town, where I had been summoned in professional haste to see a negro girl. I found the girl writhing under the pains of active labor, which, after progressing regularly and satisfactorily, terminated at 3½ o'clock A. M., in the delivery of a vigorous, well-formed male child, weighing six pounds and eight ounces.

Thus far I have alluded to no circumstance connected with this case, sufficiently striking to render it note-worthy; but when I add, that this mother was just *eleven years, eleven months, and twenty-two days old*, it will be admitted that the case is extraordinary, if not unique. Connected with the progress of this labor there was no feature notably out of the usual order of natural parturition. It was comparatively brief in its duration, and easy—no deficiency of pelvic amplitude or contractile vigor. The girl was better grown than girls of similar age usually are, with, of course, decidedly superior sexual development. Her weight was about one hundred pounds, stature four feet seven or eight inches. The catamenial function was established early in her eighth year, and continued to return with physiological regularity up to the period of her conception. As to the age of this girl, it is established upon evidence as incontestible as that of any other child, white or black, in the State of Kentucky. The juvenile, child-like expression of her features, will fully confirm the accuracy and verity of Mr. E.'s Bible record of her age.

J. P. HALL.

PROCEEDINGS OF THE COLLEGE OF PHYSICIANS AND SURGEONS, OF LOUISVILLE.

Reported by S. M. BEMISS, M.D., Secretary.

SIXTH MEETING, October 27, 1858.

Dr. Bayless was requested to examine a tumor on the side of a lady. Found the ribs protuberant from the development of tumors in the abdominal cavity. They were first discovered twenty-four years ago. She had menstruated to within two years. Was at this time fifty-four years of age. Has had repeated uterine hemorrhages. The tumor first appearing was on the right side of the median line—other tumors afterwards made their appearance. The right side was now occupied by a very large tumor, extending from the pelvis up to the ribs. It was firm beneath the fingers, with no fluctuation. On the left side was another tumor, very hard, indeed, remarkable for its hardness, presenting, however, a point of fluctuation from a point opposite the umbilicus down. This tumor was probably half the size of the one on the right side. There were, he thought, very strong reasons for supposing them to be multilocular ovarian cysts. Upon vaginal examination, the os uteri was found very high, difficult to reach; which is supposed to be significant of this character of disease, but is also an accompanying condition to other forms of disease. In this case the os seemed spread out, and orifice apparently occluded. All these points stand opposed to the idea of multilocular disease. It was not possible to detect, through the walls of the abdomen, the form or even the body of the uterus. The abdominal region seemed altogether occupied by tumors, and he was not able to determine by palpation the position of the uterus. The os uteri being flattened and spread out, would of itself lead to the inference that the uterine walls were implicated in the diseased condition. The obscurity of the case and contradictory nature of the symptoms, show the importance of close examination before instituting surgical procedure, which might have been begun in this case under supposition that it was ovarian, and the operation carried far enough to exhibit to the surgeon his error in diagnosis.

Dr. Flint. Were these tumors observable on both sides before the cessation of menstrual discharges?

Dr. Bayless. I can not state.

Dr. Miller. The perfect regularity of the menstrual functions furnishes a strong argument in support of the opinion that the ovaria had not been implicated. In almost all cases of ovarian disease with which he had met, these functions had been disturbed.

Dr. Flint. In multilocular ovarian disease, are the tumors ordinarily multiple and distinct, or is there one large tumor, and the others dependent?

Dr. Miller. I think the latter is true. Although you may feel irregularities and protuberances, still they were attachments and irregularities of one and the same tumor. This lady had lived five years with a husband, but was sterile.

Dr. Thomson. Is there pain?

Dr. Miller. No—on the contrary, remarkable indolence. The patient bore active exercise and long walks without any complaint. In ovarian disease he had not found this ability to endure active exercise. He supposed that the most satisfactory diagnostics of ovarian disease were obtained by vaginal examinations. In all cases of ovarian cysts, the uterus is pressed down into the pelvis. In this instance had not been able to introduce the uterine sound, which he had never failed to do in ovarian disease, but frequently failed in uterine tumors. He regarded this as a case of fibrous tumors of the uterus, attached to the external or peritoneal surface. The one on the left side may have undergone calcareous degeneration, and afterwards softened in the centre, which would account for the extreme hardness of one portion of this tumor, and the fluctuation over another portion.

Dr. Thomson. Would softening occur without pain or indications of inflammation?

Dr. Miller expressed the opinion that such changes might readily occur without pain or any constitutional perturbation.

Dr. Wible. Is not the attachment of fibrous tumors inferred to be to the external surface of uterus, when they are ascertained to exist, and there is found to be but little hemorrhage?

Dr. Miller. I have seen cases of attachment of tumors to exterior of uterus, accompanied with very dangerous hemorrhage.

Dr. Wible. Is it not in these cases that the Vichy waters are supposed to be so efficacious?

Dr. Bemiss answered affirmatively.

Dr. Flint. Does handling these tumors produce any regurgitation or positive alteration of position of any abdominal organ.

Drs. Miller and Bayless answered negatively.

Dr. Bayless remarked, that the extensive dullness on percussion still gave the idea that there were ovarian tumors; since in these latter the tumors were superior to the intestinal tract, while in uterine tumors the bowels were frequently between them and parietes.

Dr. Miller. There is some countenance to this opinion, but the vaginal touch, the want of properly defined os uteri, and

its flattened, illy shapen outline, showed that however much the ovaries were implicated, the uterus was the principal organ affected. It had always seemed a mystery to him that Dr. Atlee had opened the abdomen by a large section for the removal of ovarian tumor, and had found the ovaries healthy and the uterus affected.

Dr. Bayless mentioned, as from Dr. Wright, a case of abdominal section, and removal of the head of the child after it had escaped through a rupture of the uterus into the abdominal cavity. It had been found impossible to bring the head again through the rent into the uterus after it had escaped into the cavity of the abdomen, and it had been amputated and left in the abdominal cavity, from which it was removed by the knife. The woman had made a good recovery.

Dr. Miller had seen a case of ruptured uterus, in which the child had escaped into the cavity of the abdomen. He had passed his hand through the rent, and obtaining the feet, had brought them down and attempted delivery. He had succeeded in bringing the body through, but found it absolutely impossible, with all the manipulation he was able to practice, to extricate the head. As a last resort, he had amputated the head, with the faint hope that its presence would be productive of less irritation than that of the whole fœtus.

Dr. Wible stated that he had been attending a case of labor which had exhibited remarkable tardiness. There was slight left and anterior obliquity. He had endeavored to obviate this by a proper regard to position. The os uteri was dilated to the size of a twenty-five cent piece — the head presenting, and the woman having quite severe pain. This condition had existed for some days.

Dr. Miller doubted whether true labor pains had occurred.

Dr. Ronald had seen a case where one month before delivery the uterus was dilated to the size of half a dollar. He wished to inquire of members whether, in threatened miscarriage, we are not justified in rupturing membranes?

Dr. Miller is more guarded in injuring membranes in premature than in labor at full period. In nine-tenths of his cases at full term he ruptures membranes.

Dr. Ronald. Did you ever know, after rupturing membranes, a woman to go to full term?

Dr. Miller. No such instance has ever come under my immediate observation, but have been reported to me by females.

Dr. Flint desired to say, in reference to the subject of discussion in the earlier part of the evening, that no part of surgery presents such obscurity as abdominal tumors. He wished to present one case as illustrative of the truth of this declaration. He had found a tumor as large as an orange in the right

iliac region. It was moderately hard, without fluctuation, and with but little pain. Upon handling it one received the impression that the whole contents of the abdomen were disturbed. When, after death, the tumor was removed, it was found attached to the coecum. Its characteristics of consistency, &c., were those of a malignant tumor, and, to establish this point, a portion had been sent to Dr. Bemiss for microscopic examination.

Dr. Bemiss regretted that his engagements had pressed him so much that he had not found opportunity to examine this tumor until it had been lost.

Dr. Flint said that he had, at this time, a case of abdominal tumor under his notice, which, when handled, produced eructations. In the case to which he had referred, the whole of the cœcum was involved, and diseased action stopped precisely at the boundary of the colon, and above, the small intestine was healthy to the border of the cœcum. The cœcum was pervious—the appendix was enlarged—the condition was evidently scirrhous. I propose to bring this case more fully before the College at some future period. (There was no complaint of pain, but of some soreness.)

Dr. Brandies exhibited the placenta of an Irish woman who bore a child after one pain. The child was decomposed, and had evidently been retained for some time after loss of vitality. Found the placenta detached and lying in the mouth of the uterus. Upon removal it was found flattened, thinned and carnified, its vascularity destroyed, and reduced to the condition of thick membrane solidified. Child full period.

Dr. Brandies had seen a patient in 1852, seven months advanced in pregnancy, who, at that time, suffered greatly with piles. He treated her, and she gave birth to a living child. In two years she became again pregnant, and at her period sent again for him. He found the os uteri but slightly dilated, and left, telling her he would call again. Upon again visiting her some hours after this, he found the os uteri dilated to the size of a dollar. During his examination she had a pain which ruptured the membranes. Immediately after this the anterior lip of the uterus commenced to swell, and in two or three hours it was so much swollen that it was with difficulty the finger could be passed around the tumor. He had to perforate and remove the child with very great difficulty. In four or five days, while voiding the bowels, the uterus prolapsed. It was replaced. After this the patient had menorrhagia, which was relieved by cold bathing, tonics, &c. In August, 1856, found her again threatened with a miscarriage, and found a polypoid tumor in the vagina, which was removed by ligature. In 1857 delivered her of twins. Again troubled with hemorrhage, and a growth which was destroyed with actual cautery.

Pharmaceutical Department.

Citrate of Iron and Strychnia.—This combination, which has lately been brought before the medical profession, and so highly lauded, is readily prepared after the following formula:

℞—Citrate of Iron,	1984 grs.
Distilled Water,	8½ ozs.
Strychnia,	10 grs.
Citric Acid,	6 grs.

Dissolve the citric acid in ½ oz. of the water, and add thereto the strychnia; when complete solution has taken place, add the citrate of strychnia to the citrate of iron, dissolved in the remaining 8 ounces of water by the aid of the heat. Concentrate the mixture by the aid of heat to a syrupy consistence, and pour it upon a porcelain or glass surface to dry. When perfectly dessicated, it will come off in the form of fine garnet colored scales. This preparation will then contain 1-100 of its weight of strychnia, and three grains will represent 1-33 of a grain of that medicine.—Thos. E. Jenkins, *Pharmaceutist.*

Oxide of Silver in combination with Oxidizable or Combustible substances.—When creosote is placed in contact with oxide of silver in a dry state, inflammation of the creosote follows, with development of great heat and light, and the evolution of a large amount of smoke, and the oxide is reduced to the metallic state. The same effect will take place if the oxide of silver be previously mixed with morphine or like substances.

If oxide of silver and morphine, or a like substance, be mixed together and made into pills with syrup or honey, they will in a few minutes grow hot, swell up, evolve fumes, become hard, sometimes crack open, and fall to pieces.

These strong and manifest evidences of incompatibility between highly oxidizing and easily oxidizable substances, point to the rule which should be laid down, never to associate such medicines together in the same prescription.—Thos. E. Jenkins, *Pharmaceutist.*

PROPYLAMIN — A SPECIFIC IN RHEUMATIC AFFECTIONS.

With the progress of discovery since the year 1817, when Sertuerner recognized the alkalinity of morphia, the therapeutist has been more and more convinced that the organic alkalies have been specially endowed with more well defined and concentrated medical power than any other group of organic bodies. These remarkable substances, rendered stable by natural union with acids occurring with them, seem destined in the economy of nature to minister to disease, as in most instances they do not appear to possess any other uses. Since the discovery by Wurtz and others of the important fact, that organic alkalies may be produced artificially in the laboratory, it does not appear that much attention has been directed to the therapeutic power of these derivative bodies; yet in some few instances it has been accorded, and there can hardly be a doubt that a rich harvest awaits the researches of experiment in this direction by the enlightened physician. The number of these alkalies has been largely increased by Hoffman, and Anderson. Several of these, strictly artificial at first, so far as known, have since been discovered in nature, and among them propylamin, the subject of this notice.

Having been several times applied to for propylamin by physicians, and this alkaloid not being procurable in commerce, it has been thought advisable to publish a formula for its preparation, and give a notice of its characters more in detail than is found in authorities generally accessible. The origin of the demand for propylamin appears to have arisen from its asserted power in cases of rheumatism, and its variations, by Dr. Awenarius of St. Petersburg, the following notice of whose researches is translated from Bouchardat's *Repertoire de Pharmacie*, Dec., 1858:—"Propylamin, as obtained from the pickle of herrings, cod-liver oil, ergot, human urine, etc., appears, according to the author, to possess the power of a true specific for the various affections of rheumatic origin. The diagnoses of these diseases being often very obscure, one can succeed (says M. Awenarius) by the use of propylamin in bringing to light in a few days the true nature of the malady. The author has treated, by means of this remedy, 250 patients in the hospital of Kaulinkin at St. Petersburg, between March,

1854, and June, 1856; and besides, it has been employed in outside practice in a considerable number of acute and chronic cases of rheumatism. In acute cases, the pain and fever always disappear the next day. The remedy was prescribed in the following manner, viz:

℞—Propylamin, - - - - gtt. xxv.
Distilled water, - - - - f.ʒvj. Mix.
And when necessary, add
Oleo saccharum of peppermint, ʒij.
Dose. A tablespoonful every two hours.

It is necessary to carefully ascertain if the medicine is fresh and pure."

Propylamin was discovered by Wertheim in 1850, and may be obtained from various sources. Artificially from narcotina, codeia, bone oil, and by the action of ammonia on iodized propylene, and naturally, combined with an acid, in herring pickle, the flowers of the white thorn (Crætagus oxycantha), those of the service berry (Sorbus aucuparia), Chenopodium vulvaria, &c. It is most conveniently prepared from herring pickle or ergot, by distillation with potash. Propylamin is a colorless, transparent liquid, with a strong pungent odor that reminds one of ammonia. As made from some sources it has a fishy odor, whilst from others this character is wanting, and as it is metameric with both trimethylamin and metyl-ethylamin, it is possible that the latter may be mistaken for propylamin. (*Gmelin*).

Propylamin is soluble in water, has a strong alkaline reaction, forms crystallizable salts, and like ammonia, when a rod dipped in muriatic acid is presented to it, dense vapors of the hydrochlorate become visible by their union. Its composition is C^6H^9N. which is that of ammonia with an equivalent of propyl. Most of the salts of propylamin are soluble in water and alcohol, but the sulphate is insoluble in the latter menstruum. (Winckler). The hydrochlorate is soluble in alcohol, and crystallizes in large tables as obtained from Chenopodium vulvaria. All the salts are decomposed with a herring pickle odor by the mixture of potash, and when heated in solution the same fishy odor is perceptible.

Propylamin is prepared by taking any convenient quantity of herring pickle, obtained from the dealers in salt fish; this

is put in a retort or tight still with sufficient potash to render the liquid strongly alkaline, and the liquid heated. A well refrigerated receiver, containing some distilled water, being attached, heat is applied as long as the distillate has the odor of herrings. This is then saturated with hydrochloric acid, evaporated carefully to dryness, and the dry crystalline mass exhausted with absolute alcohol, which dissolves the propylamin salt and leaves the muriate of ammonia. From the former, the pure propylamin may be obtained in solution by means of hydrate of lime, using strong precautions to refrigerate and condense the vapors which are actively disengaged almost without heating. When made from ergot, Winckler recommends that a solution of the extract of ergot, known as *ergotine*, be distilled with a solution of potassa, using the precaution to have some water abidulated with muriatic acid in the receiver, which should be well refrigerated. For medical purposes it will be better to employ herring pickle, as the source of propylamin.—*Am. Jour. Pharmacy.*

Prolapsus Uteri.—Dr. Bonordon observes that as a prolapsus uteri usually arises from hypertrophy of the organ and a relaxed state of the round and broad ligaments, the indications are to remove the hypertrophied condition, and to strengthen the ligaments. In two cases he has been enabled to completely fulfil them by internal remedies. He administered 20 drops of *tr. ferri. mur.* morning and evening, giving with the evening dose also three gr. of *secale cornut* and ten gr. of *gum galbanum*, the external parts of generation being well rubbed several times a day with Hoffmann's *balsamum vitæ.* At night, the patients were directed to lay with the pelvis somewhat raised. The secale was continued for fourteen nights, next alternate nights, then a while at longer periods.—*Medical Journal of North Carolina.*

Warts.—In the American Journal of Pharmacy, Dr. C. O. Monelle, of Baltimore, gives the following method of extirpating these unsightly excrescences: "I first cauterized the wart with lunar caustic, sufficiently free to reduce it to a level with the surrounding cuticle, and then upon the exposed surface, dropped from three to five drops of the tinct: iodine; this I repeated three or four times daily for three days, and then applied a dressing of lint and simple cerate, which healed the sore very rapidly.—*Ibid.*

Editorial Department.

In our last issue we alluded briefly to the importance of a good primary education to students of medicine, and the responsibility which devolved on those under whose supervision the beginner was to pursue his studies.

It will be conceded, that whilst a classical education may not be essentially necessary to the successful practice of our profession, yet, that it is a most material aid to our investigations, and will remain so until a complete change shall have been effected in our nomenclature. This latter is indeed desirable; for the vagueness by which it is at present characterized, and the numerous falsities which it embodies and preserves, are sufficient arguments abstractedly against its continuance. But what may be desirable and what practicable, are, unfortunately, distinct propositions. Were any change to be effected in this particular, the revulsion should be radical, and in inducing it new difficulties would present themselves, which, coupled with the almost hopelessness of the task, might be considered greater than those which already exist.

In view, therefore, of these points, and until such a change as that spoken of is produced, we can not but conceive that a study of Latin at least, should be urged upon all students. If they have not previously given some attention thereto, they will be compelled to do so as soon as they begin to read their text-books, or apply themselves to anatomy, for names sound hard and meaningless to those who do not understand their etymology; and one great, perhaps the greatest difficulty with students in anatomy, is the remembrance of its nomenclature. We would not be understood to desire the exclusion of such as are not Latin scholars—we only mean to say that to such the study of medicine and the collateral sciences is infinitely easier than it is to others. Some of the very best students whom we have ever known were not of this class, but if they had been their studies would have been less laborious.

From one end of our land to the other—from the surface, and from a few feet below the surface—there are evidences, living and dead, which might testify against those who, while decrying every pathy but their own, which is the greatest pathy of the age—humbugopathy—are willing to admit to full fellowship those who do not attend lectures at all, and regarding whose term of study no questions are asked, simply that an additional name may be added to their graduating list. While such pettifogging is indulged, the lay profession must not look forward too hopefully for any concerted action on the part of the Convention, but taking the matter in their own hands, and at home, and in their own way, let them first plant and nourish good seed—let them select carefully the soil into which it is to be transplanted, and all will soon be well. Our care should be for the new plants—the old limbs and fungoid growths will soon be lopped off.

None would rejoice more heartily than ourselves to see, and none will more cheerfully co-operate to produce concert and efficiency in the Convention; but if the effort at reformation fail there, it surely need not in the private offices of practitioners.

One gentleman has returned a copy of our last number, with the explicit statement that "he is not a subscriber," and the gratuitous one "that he don't wish to become one." We are very glad that he does not, for any person who will take advantage of the Post Office Department in its present condition, by writing on a paper to save three cents, might perhaps go further to save three dollars. Besides this, we never expected him to be a subscriber, nor is his name upon our list.

Such of our numbers, and such only, as contain the proceedings of the State Medical Society, are sent to members of that Society according to our agreement, but we do not hence consider them as subscribers, nor need even such read the *News* unless they wish to.

Dr. Thomas D. Mutter, Emeritus Professor of Surgery in Jefferson Medical College, died at Charleston, S. C., on the night of the 16th March. His enviable and widely extended reputation will long survive him.

At a public Commencement held in the Hall of the University of Louisville, Monday evening, February 28th, 1859, the following gentlemen were admitted to the degree of Doctor of Medicine, to wit:

Names.	Residence.	Subject of Thesis.
Ashton, William W.	Kentucky.	The Abuse of Alcohol.
Barnes, Horace B.	Ohio.	Anæsthesia & Anæsthetics.
Bice, Cornelius,	Indiana.	Remittent Fever.
Bottomley, E. Wilfred.	Kentucky.	Phthisis Pulmonalis.
Browne, Jesse.	Tennessee.	Typhoid Fever.
Brummel, Josiah L.	Mississippi.	Digestion.
Bussey, John B.	Texas.	Intermittent Fever.
Caldwell, Charles L.	Missouri.	Malaria.
Coffman, Absalom F.	Kentucky.	Phthisis Pulmonalis.
Conway, Frank T.	Kentucky.	Semeiology and Diagnosis.
Cox, Henry C.	Kentucky.	Pleuritis.
Crawford, John W.	Illinois.	Typhoid Fever.
Ely, James R.	Kentucky.	Fracture of the Femur.
Foote, Virginius.	Kentucky.	Inflammation.
Goodloe, Archie W.	Kentucky.	Wounds.
Hale, Caleb,	Kentucky.	The Operation of Medicine.
Herring, Henry C.	Kentucky.	Pneumonia.
Hodgen, Robert T.	Kentucky.	Placenta Prævia.
Houston, James J.	Mississippi.	The Signs of Pregnancy.
Jackson, John M.	Kentucky.	Typhoid Fever.
Lawless, Benj. L.	Kentucky.	Bright's Disease.
Lively, William A.	Florida.	Menstruation.
McCoy, James A. C.	Indiana.	Puerperal Peritonitis.
McGowan, William J.	Kentucky.	Pneumonia.
Milner, Isaac L.	Indiana.	Pneumonia.
Morrison, Alonzo M.	Kentucky.	Variola.
Parrish, Allen H.	Tennessee.	Acute Rheumatism.
Reynolds, James W.	Kentucky.	Uterine Hemorrhage.
Shuck, John I.	Kentucky.	The Effects of Tight Shoes.
Sigmon, Peter G.	Indiana.	Pneumonia.
St. John, William C.	Kentucky.	Typhoid Fever.
Strother, John D.	Kentucky.	Inflammation.
Wathen, William C.	Kentucky.	Scarlatina.
Webb, Thomas W.	Kentucky.	Gonorrhœa.
Whitnel, Robert M.	Kentucky.	Synovitis.

At the same time, Edward W. Lane, M.D., of Scarboro', Georgia, was admitted *ad eundem*, in this institution; and the honorary degree of Doctor of Medicine was conferred upon Dr. Silas Shepherd, of New York, and Dr. William M. Ely, of Kentucky.

The Hon. Jas. Guthrie, President of the Board of Trustees,

addressed the graduates in a most felicitous and impressive manner, dwelling upon their duties and responsibilities with a force and beauty which they will long remember and appreciate. The hall would not accommodate the audience, and the adjoining room was occupied by a great many who were unwilling to lose the opportunity of witnessing the ceremonies.

The valedictory address was delivered by Professor Palmer, which announcement is sufficient for those who have heard this gentleman lecture; and therefore it would be needless for us to express our admiration of the manner in which it was delivered, or the matter which it contained. Furthermore, he is our colleague, and hence a eulogistic strain would not accord with our sense of delicacy, however richly it might be merited.

Respecting the graduates we may consistently speak with less reserve, and our remarks in reference to them may include others also, for certainly, a more intelligent, gentlemanly, and assiduously attentive class we have never seen assembled.

Among the first course students were many of high promise, and we anticipate their return with pleasurable hopes. Their deportment during the past session has secured the friendship of many who will greet them with a hearty welcome.

Our Exchanges.—We have received twenty-eight exchanges, which embrace the principal ones of this country. We feel obliged to our cotemporaries for their courtesy, and will notice their journals as soon as we shall have completed our list. There yet remain two or three which we would be glad to receive. Of the *Chicago Journal* we have only seen the January number.

A limited number of copies of the report on Influence of Marriages of Consanguinity upon offspring, by the senior Editor, are for sale at Maxwell & Co.'s in this city. Copies will be mailed, postage paid, to orders enclosing thirty cents in postage stamps, or otherwise, to Maxwell & Co., Main street.

The present number of the *News* has been delayed a few days. Hereafter we shall endeavor to issue regularly on the first and fifteenth of each month.

ABSTRACTS FROM THE FOREIGN MEDICAL PRESS.

Treatment of Fistula in Ano by Caustic Cylinders of Gutta Percha and Chloride Zinc.—We abstract the following suggestions from an article on this subject in the *Gazette Medicale* of January 1, by M. M. Salmon and Maunoury, Surgeons of the Hospital at Chartres:

To be attacked with fistula in ano, is, in common opinion, to labor under a serious malady; and, in truth, the vulgar opinion is not unreasonable, for in one hundred and thirteen operations for fistula in ano, performed at the Hotel Dieu at Paris, from 1837 to 1841, there were nine deaths, that is to say, one death for every thirteen operations.

The following is the method directed for the application of the caustic: Take a plate of gutta percha and chloride of zinc, cut from this plate a style or cylinder, more or less long, more or less acute, according to the length or depth of the fistula. Upon introducing this cylinder along the fistulous track, the tissues in contact with the caustic will contract to such a degree that it will be found more difficult to remove the style than it was to introduce it. The chloride of zinc then has a peculiar action upon the surrounding tissues. It originates in these structures a powerful plastic influence, which results in rapid adhesion of the walls of the fistula, in consequence of the contraction it produces. Those who have witnessed the action of these caustics, and who have removed tumors with Canquoin's paste, know that after their decadence the cicatrization of the wound occurs with marvellous rapidity. It is this plastic inducing property of the chloride zinc which constitutes it the caustic *par excellence*. After a cauterization made with the chloride zinc, the tissues appear to acquire in some manner the property of concentric retraction.

After detailing the previous history and treatment of four cases, the author gives the following resume:

We have had under our care during two years, four cases of fistula in ano, all of which we have treated by the caustic of chloride zinc and gutta percha. The pliability of the cylinder permits its easy introduction along the fistulous canal, however tortuous, to its full extent. We suffer the caustic to remain a variable time, according to the nature of the case and long existence of the fistula. In one patient it remained for six hours; in another, two hours; in the two others, from five minutes to an hour. We were able to visit the last two every day, and observe the condition of the disease. The other two we could see only once a week.

The treatment was continued from six weeks to two years

and a half. All were cured without losing one moment from their ordinary pursuits. There was no precaution with regard to dressing the sore, and we left to the patient himself the care of removing the caustic style after it had remained the prescribed time. No accident supervened.

If we compare the two methods of treatment of fistula in ano—that by cautery and that with the knife—these are our observations: the former is simple and without peril, the latter is painful and complicated. In one, there is simply the dressing of the fistula; in the other, there is a serious operation. In the one, the patient goes about and attends to his usual occupation; in the other, he is obliged to confine himself to his bed for five or six weeks. In the first, there is no fear of accident; in the second, hemorrhage may occur either during or after the operation, and sometimes death. Moreover, if the subsequent dressings are not made with every possible care, new sinuses form and relapse accrues.

After having set forth the advantages of one process, and the disadvantages of the other, we recommend the treatment by the caustic of gutta percha and chloride zinc. If by chance the cure should not be effected by this means, it will then be time to have recourse to the knife.

For the preparation of this caustic, it is necessary to dissolve the gutta percha in a porcelain cup. When in a state of fusion throw over it the determined amount of chloride of zinc, which should be thoroughly incorporated with the gutta percha by means of a spatula. We thus obtain a plastic paste which may be moulded like nitrate of silver into cylinders or in sheets like Canquoin's paste. There is nothing more simple, but it is necessary to sieze the proper moment to withdraw the mixture from the fire.

Pebble in the Trachea, with Emphysema of the Cellular Tissue of the Neck and Face. *Translated from Wiener Medicinische Wochenschrift, for the Medical News.* By. W. N. Hailman.—A girl two and a half years of age, swallowed a pebble on the 20th October, 1858. A spasmodic cough immediately ensued, so violent as to threaten suffocation, and attended with livid countenance. Two hours afterwards, emphysema of the cellular tissue had manifested itself, commencing at the upper margin of the sternum, and extending rapidly upward and over the right side of the face—breathing difficult and convulsive. The pebble evidently moved up and down in the trachea during the acts of respiration, and being carried during expiration against the glottis, excited its spasmodic closure.

Prof. Dr. Schuh made an incision through the skin and subjacent cellular tissue, from the upper margin of the thyroid

cartilage to the superior border of the sternum, and laid bare the trachea below the thyroid gland. An incision was then made into the trachea, and the pebble removed. The upper part of the wound was closed with adhesive plaster, the lower part was suffered to remain unclosed to allow the air from the surrounding tissues to escape. A piece of sponge was, however, placed over this portion, in order to induce respiration through the mouth. The child was then laid in a horizontal position, no pillow under its head. It was quiet after the operation, with no expectoration from the wound.

The extracted pebble was smooth, and an almost regular tetrahedron, about 3-10 of an inch broad, and 5-10 to 6-10 long (Vienna measure). The first night, patient a little restless. Succeeding day, slight fever, emphysema disappeared from the neck. Third day, disappeared altogether from face, fever scarcely perceptible. Sixth day, the child played, sitting up in the bed. On the first of November, wound was closed, and a few days later, cicatrization complete.

Ambergris.—We learn from the *Boston Ledger* that a sale of 750 lbs. of ambergris was made in that city on the 8th inst., for the sum of $10,000, and upon which the purchaser will probably realize $6,000. It was taken from one whale, and brought home in a ship recently arrived at Nantucket. This substance is a morbid secretion of the liver of the spermaceti whale, and is generally used, in its alcoholic solution, as a perfume. It is more often found in whales of a sick and lean appearance, indicating that the ambergris is a product of disease. It is usually found in lumps of from one to thirty pounds in weight, and the largest piece hitherto known weighed 182 pounds, and was bought by the Dutch East India Company of the King of Tidore. Another piece from inside of a whale near the Windward Islands was sold for £500 sterling.—*New Bedford Mercury.*

Diptheritis.—Dr. Campbell (*Southern Med. and Sur. Jour.*,) recommends for this disease the internal exhibition of from 5 to 15 grains of quinine, in divided doses, during the earlier part of each day for several days, and the local application of powdered alum to the throat.

Married—On Wednesday evening, the 9th inst., by Rev. Chas. Campbell, Dr. D. D. Thomson, of Louisville, to Miss Ella A. Enders, the beautiful and accomplished daughter of Mr. Henry Enders, of this city.—*Paducah Herald.*

Semi-Monthly Medical News.

VOL. I. LOUISVILLE, KY., APRIL 1, 1859. NO. 7.

REPORT OF THE COMMITTEE ON SUITS FOR MAL-PRACTICE.

Submitted at the Fourth Annual Meeting of the Kentucky Medical Society, by C. H. SPILMAN, M.D., *of Harrodsburg. Ky.*

MR. PRESIDENT:—The subject selected for the present hour, which it becomes my duty to present for your consideration, is manifestly complicated, involved, and intricate. I very much fear, therefore, that I shall not be able to answer the expectations of our Society, whose paramount obligation it has ever been, and whose ardent desire it will ever continue to be, not only to maintain the honor and usefulness of our profession, but, as far as practicable, to secure the safety of the public, and protect it from imposition.

The task imposed on me may prove an ungracious one; but I have no apology to offer, nor shall I shrink from responsibility. It is as difficult as ungracious. A mere glance at the subject must convince any one that truth does not lie upon the surface. It is a controvertible subject. So unsettled and indeterminate are the premises, and so constant the alternation of lights and shadows in the field of medico-legal science, that the conclusions attainable by the most logical course of reasoning of which the subject is susceptible in the present state of our knowledge, are necessarily, to some extent, inconclusive and unsatisfactory. I am free to admit, that some of the positions I have taken, I approached with hesitation, not being fully satisfied myself of their correctness. I can not hope, therefore, to explore the entire field before me, without, at times, occupying disputed territory. I lay it as an offering, however, upon the altar, not entirely without the hope that it may be an acceptable one; and whilst it must needs undergo the ordeal

of criticism, and it may be, of animadversion, I feel a comforting assurance of being invested with the mantle of charity, as a shield against the shafts of bitter invective, or unnecessary rigor in the examination of the errors with which it may very probably abound.

It has been remarked by one of the soundest, most practical modern philosophers, that the learned professions of law, medicine, and theology, constitute the three grand pillars of our social compact. It is only, however, where there is a full recognition on the part of the members of these professions respectively, of the responsibilities which their positions impose, the ennobling truths which they are commissioned to bear, and the sacred trusts confided to their hand, that this sentiment can command our unqualified assent. Without that pre-eminence of intellectual culture, and superior excellence of moral character, which ought to be implied in the very positions they occupy, their influence, instead of elevating and ameliorating the general condition of society, would tend, most irresistibly, to its intellectual degradation and moral corruption.

Whatever may have been the fortunes of the medical profession in the ever-varying phases of society, at different periods of the world's history, from its origin to its present high state of improvement and usefulness, there is one consideration eminently calculated to inspire its cultivator with a just pride, and a profound sense of the interesting and important relations it sustains to society, and the weighty responsibilities those relations impose.

The high appreciation of the healing art, and the honor bestowed on it, amounting almost to veneration, from the earliest ages of antiquity, afford a lofty idea of the estimation in which it was held—the high expectations of the public, and the important character of the mission with which it is invested.

A faint conception of the honor paid to medicine at an early period of our history, may be gathered from the sacred writings, from which we extract the following beautifully simple examples:

"Honor a physician with the honor due unto him, for the uses ye may have of him, for the Lord hath created him.

"For of the Most High cometh healing, and he shall receive honor of the king.

"The skill of the physician shall lift up his head, and in the sight of great men he shall be in admiration.

"The Lord hath created medicines out of the earth, and he that is wise will not abhor them.

"With such doth he heal them, and taketh away their pains."

If there be not a manifest impropriety in applying immortality to man without reference to a future state of existence, then, certainly, medicine has some reason to be proud of the immortality conferred on some of its early cultivators. Without going into fabulous or poetic regions, in which some of the early physicians are represented as receiving not only the highest honors, but the homage of the multitude, the high estimation in which some of the productions of the pioneers of the profession are still held, afford to their successors, who distinguish themselves in the healing art, a guarantee of a future renown, if not as brilliant, no less solid and enduring than theirs.

It is perhaps true, that the pathway to distinction is more difficult now than formerly,—that to acquire eminence in the profession, higher attainments, and a larger measure of knowledge and skill, are requisite.

The opinions and doctrines of one man may never again sway the entire medical world, as did those of the Coan sage. The great thirst for medical knowledge, and the rapidly increasing facilities for its acquisition, rendered alike accessible by all the members of the profession, have brought all who are animated by a desire for its honor and usefulness, more upon a common level. The medical mind is no longer shut in and incarcerated by a blind devotion to authority. A spirit of mental independence, personal responsibility, and professional enterprise, stirs every bosom. The avenues to distinction and usefulness are alike open to all, and the pinnacle of fame and fortune holds out the most inviting attractions to the laborious aspirant. A wholesome, all-pervading spirit of emulation, leading to a riper scholarship and a more elevated standard of professional excellence, is the legitimate offspring of this equalizing process, bringing to light and establishing, in astonishingly rapid succession, new therapeutical relationships, by which the practice of our art is becoming daily more satisfactory and successful.

I would not disguise the fact, however, that, during the last half century, the relative position of our profession and the non-medical public has undergone a marked change. Implicit confidence, amounting in some instances to blind credulity, has given place to a wide-spread skepticism as to the powers and capabilities of the healing art. This partial revolution in the public mind, which seems chiefly to have infected the ranks of the illiterate, who are incapable of taking a philosophical view of the subject, and wholly disinclined to examine its claims, has resulted from a variety of causes, somewhat obscure, but not wholly inappreciable. For this prevailing distrust as to the curative power of our art, I admit that the profession is, in part, responsible; and so far, we plead guilty. The most prolific sources of skepticism however, are *extra* the profession, over which we have no control, and consequently for which we can not be held responsible.

Before attempting an enumeration of the various causes of skepticism and a demonstration of their fallacy, I will premise an assumption, the truth of which, I doubt not, will be satisfactorily vindicated in the sequel, viz: The claims of medicine to the confidence of mankind, as regards its efficacy in the mitigation and cure of diseases, rest upon a basis which can not be shaken. Although it will be admitted, that, from its great abstruseness and complexity, the science of medicine is, as yet, in an immature state, and consequenlty has not accomplished all of which it is capable; nor does it claim exemption from those frailties and miscarriages which characterize all human enterprise; still its power for good has been great; its value beyond all computation; and its promises of yet nobler achievements, in the highest degree encouraging.

Its beneficent ministrations have been described by a late writer in the following beautiful language: "Ever since the first dawn of civilization and learning, it has been the true friend of the suffering sons and daughters of men. Through its ministers and disciples it has cheered the desponding; it has lightened the load of human sorrow; it has dispelled or diminished the gloom of the sick chamber; it has plucked from the pillow of pain its thorns, and made the hard couch soft with the poppies of delicious rest; it has let the light of joy into the dark and desolate dwelling; it has rekindled the lamp

of hope in the bosom of despair; it has called back the radiance of the lustreless eye, and the bloom of the fading cheek; it has sent new vigor into the failing limbs; and finally, when baffled in skill, and exhausted in all its other resources, handmaid of philosophy and religion, it has blunted the arrows of death, and rendered less rugged the precipitous, the inevitable pathway to the tomb."

In attempting, however, to vindicate the claims of medicine to the confidence of the public—exhibit the indissoluble connection subsisting between its highest state of cultivation, and the welfare of mankind, and congratulate you upon its noble achievements, I may not escape an inquiry into the degree in which it is itself responsible for the prevailing skepticism as to its competency. I have barely time briefly to advert to these canses, in which you will please indulge me, as it seemed indispensible to a lucid exposition of the subject before me.

Amongst the causes which have conspired to retard the progress, impair the usefulness, and consequently lessen public confidence in the efficacy of the medical art, may be mentioned the rage for speculation, and theorizing, which has characterized medical literature until very recently, and the almost total neglect of the only means of enriching the science, observation and experiment. It is a lamentable truth, known to every one present, that a large proportion of the ablest medical writers, both in Europe, and our own country, have written under the dominion of some favorite dogma. Instead of observing closely the phenomena of nature, following her teachings, and faithfully recording facts as presented, one leading idea seems to have possessed the mind, to the exclusion or all others; and the principle object, the establishment of some cherished theory, the promulgation of some favorite doctrine. It is a gratifying fact however, that the one-idea age is rapidly passing away. The humoralism of Bœrhave; the nervous doctrine of Cullen; the cerebral doctrine of Clutterbuck; the physiological doctrine of Broussais; the vena-cavaism of Cooke; and the multitudes of theories that have successively agitated the medical mind, ingenious and elaborate though they be, after a brief reign, have all shared the same fate, and like other remnants of antiquity—the Indian mounds of our own country, or the crumbling walls, and moss-grown ruins of other lands,

serve only as mementoes of past ages. "The contest between the ideal and demonstrative pholosophies has terminated in a complete triumph of the latter." A sounder, more philosophic spirit now pervades the ranks of our profession, and presides over all medical inquiry. Still, some of the fruits of the speculative philosophy remain, to which may be attributed, in part, the immature, unsettled state of the science, and the general distrust to which we have alluded, as to the powers and capabilities of the healing art.

I hope I shall not subject myself to the charge of censoriousness, or incur the imputation of assuming to be an expounder of the principles of Ethical Philosophy, should I allude to another cause of the prevailing skepticism as to the capabilities of our art. It is a cause, insidious and elusive, but powerfully operative; and will be found to underlie, not only the general distrust which has obtained in the public mind, but the whole compass of professional abuses and misrule, no less detrimental to the safety and welfare of society, than the respectability and usefulness of the profession. I allude to a want of a fraternising spirit in the profession, and the antagonistic position frequently assumed by its members, one towards another.

The history of man, I apprehend, affords not an instance of a more glaring misconception of true policy, than elevation and success sought by one, in disparaging and underestimating his brethren in the profession. Either from the abstruseness and complexity of the science of medicine, or a prevailing belief that its interests are separate and distinct from their own, men, otherwise intelligent, do not trouble themselves to understand the subject, although it would not be difficult to show there is none belonging to the whole range of natural science that concerns them so much. Hence, the only competent judges of the merits of medical men, are physicians themselves. The profession being embodied in the lives, the labors, and the conduct of its members, and each member respectively constituting an integral part of the profession, then the character and standing of the profession, and the confidence reposed in it by the public, must depend on the acknowledged skill and ability of its members. But A disparages B, by insinuations, inuendo, or otherwise. B retorts upon A in like terms of detraction. Thus A and B both stand before the public, on the

testimony of the only competent witnesses, as reprobates, and unworthy of confidence. The result of this, it will be perceived, is mutual recrimination, and the disparagement of all. The extent of the injury accruing to the profession, by such a detraction, depends upon the proportion (God only knows how many), who are betrayed into such indiscretions. The verdict of the profession, as to its claims to public confidence, and that of the non-medical public, can hardly be expected to differ. An enlightened community will not improperly conclude, that the discoverer of the motes in his brother's eye, has not his own entirely free from them. While they give credence to the presence of motes in the one case, it will be natural to suspect the existence of a beam in the other; and thus the estimate entertained of all, is lowered. When, therefore, that regard and confidence are denied us, which the efficacy of our art, and the value of our services demand, and every species of charlatanry thus finds an inlet into the various avenues of society, let us indulge a murmur, after we shall have presented an undivided front against every attack upon the character and usefulness of the profession; and evince our high appreciation of it, by exhibiting our regard for, and confidence in each other, as its exponents and representatives. Thus commending to public consideration the legitimate claims of medicine, as illustrated in the lives, the labors, and the inestimable services of a host of living cultivators and practitioners; and nobly vindicated by its progressive improvement, its onward march, its daily accessions of knowledge, its sounder, more practical philosophy, its more chaste elevated literature, its purer, more refined ethics, and above all, its more rational accurate therapeutics, which characterize its present state, it will assuredly regain and command the regard and consideration of the public, proportioned to the brilliancy of its achievements, and the degree of its usefulness.

I propose now to call your attention, very briefly, to one or two causes of skepticism, over which our profession can exercise no control.

From a want of information amongst the masses, in regard to medical science, and a misconception of the extent of its powers of cure, extravagant expectations, and unreasonable exactions, have been indulged, admitting no apology for the

circumscribed boundaries of the resources of our art. Expectation has been founded upon the assumption, that the resources of medicine are commensurate with the demand of the sick chamber. This is expecting of medicine what can be said of none of the physical sciences, a complete mastery of the subject. Medicine makes no such pretensions. Such is the complex nature of the science, and such the difficulties which surround the whole subject, that, while much is known in relation to it that is practically useful, it is highly probable, that when all the elements, properties, phenomena, and relations, which constitute its totality in its mature state of development, are fully unfolded, it will be clearly seen that there is now, comparatively, but little known; while, over many diseases, art has acquired a gratifying control, there is still enough incompetency to humble our pride, and prompt us to still greater exertions to push our discoveries, and add to our already brilliant achievements. The great intricacy of the subject, the difficulties to overcome, and the immense toil and labor requisite for rendering available even the known powers and capabilities of the art; indeed, the acknowledged imperfection of all physical science, and the circumscribed limits of human knowledge, have been lost sight of, and the expectations of the public, and the demands upon our profession, founded upon the assumption that science is perfect, and the resources of our art should meet all the exigencies of the sick chamber. It is no less true in morals, than in physics, that a state of excitement is, by an immutable law of nature, followed by a corresponding degree of depression. It is very easy to conceive, therefore, how unrealized expectations so extravagant, and exactions so unreasonable, should give place to doubts and apprehensions, as to the curative power of medicine. That it is appointed to man once to die, depends no less upon physical relationships, and the natural constitution of things, than the fiat of the Great Architect. That certain forms of disease, and species of injury, under the best possible remedial management, with all the lights we possess, have proven intractable, I admit; and that they will continue so, though in a greatly diminished degree, after our science shall have attained the highest possible perfection, is by no means improbable. The physician only can appreciate the complexity of the subject,

and the difficulties that beset his path, in his devious search after medical truth. The subject of his inquiry is a compound being—a rational soul, tenanting a material fabric. In consequence of this wonderful, inexplicable connection between mind and matter, we rarely find the causes of disease simple. A morbid impression upon the mind or body, acts and re-acts reciprocally, producing a complication of phenomena not easily unraveled. An infinite number of bodily organs, continually sympathizing with each other, and a countless host of moral and physical causes, daily calling these sympathies into play, it is not surprising, that an interminable list of diseases, mental and corporeal, of every grade of complication, should meet the medical philosopher at every step of his progress, and not unfrequently perplex and confound him. Nor is it surprising, that there are still many pathological states for which no therapeutical relationships have been ascertained; still less marvel, that the non-medical public should fail in forming an accurate judgment, or entertaining enlightened views, in regard to the merits of medical men, or the efficacy of medical art; when, how enlightened soever upon all other subjects, it is in undeniable proof, by actual calculation, and the most accurate medical statistics, they know so little on this subject, that they are voluntarily immolated by thousands every year, on the altar of the grossest empiricism. When ever the disclosure of statistical medicine shall have revealed to the public mind the fact, that all those nations of the earth, doomed to ignorance and quackery in medicine, have greatly diminished in population, and some of them become almost extinct from the ravages of disease; and even in countries favored with scientific medicine the ratio of mortality is incomparably less in localities enjoying the counsel and advice of enlightened physicians of the regular type, than that under the regular reign of empiricism; the great importance of scientific medicine, and its indissoluble connection with the safety and welfare of society will appear so manifest, that we shall not only have it honored and appreciated by the people, but fostered and protected by the State. Throw your statistical facts broadcast upon the bosom of society—let the people but see their true interest on this subject, as the enlightened physician now sees it, and the regular profession will soon rise in public estimation, and empiricism

no longer curse the land with its thousands of immolated victims.

Another reason I assign, why the profession does not occupy that elevated position in society to which it is entitled, is found in the apparent contrariety in the doctrines and practices of its different members. In this, we have a striking exemplification of the incapacity of the non-medical public to render a just and fair verdict upon either the merits of medical men, or the efficacy of medical art. That there is a diversity of opinion, and a shade of difference in practice, amongst medical practitioners, is admitted. But that this difference is greatly exaggerated for want of a clear apprehension of the subject, will appear from a very slight examination. Physicians are frequently supposed to have a controversy, when in reality they are acting in perfect unison, and their apparent discrepancies are perfectly reconcilable and harmonious. For example, several physicians are summoned to the bedside of the same patient. They are alike minute in their examination of the case; and we will suppose, harmonize in their diagnoses. It is a case of venous congestion or vascular excitement, demanding depletion. A recommends the lancet. B suggests a purgative. C supposes an emetic to be indicated. D, perhaps rather more cautious and conservative, prefers reposing the case on the action of diaphoretics. Of course, the non-medical spectator, discovers in this seeming conflict, "confirmation strong as proofs of holy writ," of the truth of the proverb, "doctors will disagree;" and very safely concludes that there can be but little certainty or safety in medicine, while those who exercise it are so divergent in their views, and variant in their practices. But had he understood the subject, he would have discovered in all these suggestions, apparently so incongruous, the same *ultimatum*. The lancet depletes. Purgation depletes. Emesis depletes. Diaphoresis depletes. Thus, while there is a discrepancy in mode, there is a harmony in the result. The same general indication is fulfilled by either method. I have not time nor space here to elaborate this thought, but simply remark, that when you shall have disposed of all the differences in doctrine or practice, between medical men of the regular type, which are imaginary, the objections to medicine on this ground, "will vanish into thin air," and

it will be found to contain no more discordant elements than other professions. I affirm that in the cardinal principles of the science, there is a perfect argreement; and the lines of differences in practice are nearing, and will approximate, as the therapeutical relationships become more clearly ascertained, and more fully established.

I have given this rapid and very imperfect sketch of the relative position of the medical profession, and the non-medical public, to prepare the way for a more lucid exposition of the main question before us, viz: to what extent medicine should be held responsible to the civil tribunals of the country.

(To be continued.)

"NATURE AND ART."

The profession should hail with a hearty welcome the appearance of such a book as "Nature and Art," from such a man as Sir John Forbes. The great need of the American people is a race of doctors who have the courage to tell them plainly *to take less physic.* For generations their habit, from babyhood up to the lean and slippered pantaloon, has been to medicate for every conceivable ailment. Their demand is not simply for the doctor, but for physic also; and so persistent, so overbearing, and so authoritative in their folly, that upon the least hesitancy in the medical attendant to issue his warrant, they promptly conclude that *he don't understand his business.*

After a life-long education in the faith that medicine is a sort of lever-power by which the doctor lets up the dead weight which is pressing them to the earth, it is not a very easy task to satisfy them that there are other powers which, *if let alone,* may more certainly and often more readily bring them to their feet and their accustomed vigor. For how much of this insatiable thirst on their part the doctors themselves are responsible, it is perhaps impossible accurately to determine: but that the share is a very large one, none who have looked at all into the subject can for a moment question. It is one of those instances of action and reaction where the forces are so nearly equal as to approach closely to a solution of the long sought problem of perpetual motion, but in the last ten years the

motion has perceptibly lessened, and it is to be hoped that in the next ten the *swing* of "polypharmacy" will have come to dead halt.

In one of the departments of our profession, it has passed into an axiom that "a meddlesome midwifery is bad,"—so is meddlesome medication—but is it taught to the people? Are they not, on the contrary, industriously supplied with arguments in favor of their preconceived *notions* that for almost all their ailments there is some specific, ready remedy? Who undertakes to educate them up from this ancient faith? They have believed the thing so long that they absolutely claim to *know* it, and undertake to give you *reasons* for the absurdest beliefs that the mortal mind can cling to.

From the day that Elisha told Naaman to wash in the river Jordan, till now, the world has turned with contempt from the simplicity of nature, and clung with credulous tenacity to pompous and high sounding pretensions, forever relying upon some mystery sustained by charlatanry, in the hope of being cured of its leprosy. This is the track upon which the popular mind has traveled forever heretofore, and such is the line upon which, unless arrested by conservatism in medicine, it will go forever hereafter. And while they are in search of *wonders*, with a faith which halts at nothing, how many of us have the candor to say honestly, "I have no wonders to show you?" Instead of pandering to their absurd belief that all the ills which flesh is heir to, the gravest and the lightest, are promptly and certainly amenable to the skill which we possess, how many of us have the frankness to tell exactly the truth in regard to the extent of our control over the malady submitted to us? Is it manly, that in relation to the very highest interests of humanity, we should systematically and persistently deceive those who look to us for light and for guidance? Because the patient demands physic, are we compelled to give it? Is it replied that we will *lose the case? Then let us lose it.* If the man is a reasonable being, and in his senses, it is our duty, by all means, to satisfy him that his condition is safe without any interference of ours; and that such interference would only perturb and thwart the healthful processes already at work—this is the exercise of our best judgment, and when he demands that we shall sacrifice that judgment,

and with it our own personal dignity and self-respect, why, in the name of all that's decent, let us *lose the case.* With too many of our profession it is certainly true that the doctor is almighty, and this goes far toward an explanation of the otherwise unaccountable fact that physicians who are thoroughly upright and fair dealing in all their relations in life, are strangely given, in this matter of physic, to play an unfair game. We must cease to *make a trade* of our profession. We live by it, I know—so does the preacher; but if he is only to give me such soul-physic as I may demand of him, because forsooth he gets twenty or fifty dollars a year, I should regard him as very unfit for the high mission which he claims as his.

I do not take the ground, that the physician should under all circumstances disregard the appeals of his patient for more physic. The life-long drift of his mind having been toward the indispensable necessity of medicine for the removal of all maladies, his delirium or his imbecility may render him unfit to be influenced by even the clearest reasoning. *To him*, a prescription utterly inert, manifestly possesses therapeutic power, and in the legitimate exercise of our best judgment as ministers of a healing art, we should adopt this as a means of healing him. But these are exceptional cases, and our object should be to prevent the exceptions becoming the general rule; for so soon as the practice of medicine becomes a mere resource for the accumulation of money, it loses its proper grade among the avocations of men, and becomes a trade which may very worthily be adopted by the greedy and unprincipled who are ever ready to fatten upon the fears and the misfortunes of their fellows. The physician who lets himself down to money getting, and the various artifices which lead to it, may acquire the consideration which readily attaches to fortune, but he should make up his mind to sacrifice all that higher estimation which is accorded, by the intelligent and the just everywhere, to him who earnestly devotes himself to the *art of healing.* This vulgar pandering to the popular demand for physic, with its attendant evils in the shape of renewed prescriptions and repeated visits, is unworthy the conduct of a gentleman who claims to belong to a beneficent and enlightened profession. And just in proportion to the dissemination among the people of correct views in regard to the power of medicine as

a controller or modifier of disease—just in proportion to their right appreciation of the relative forces of nature and art in the removal of physical ills, in that proportion will the money makers and their multitudinous prescriptions be regarded as a pest and a nuisance, deserving to be abated as an offence against decency and peace, and all rational hygiene.

It is not enough for an honest man to discuss with a pleasant and defferential air, the probabilities that his patient may after all be right, while *he*, by inference, is left in the thick untrodden forest, ignorant even of the cardinal points, and groping his way to whatever possible daylight his terrible surroundings may after a while let in upon him. In the legitimate discharge of his duty, let him teach the patient the folly of that absurd sophism which forms the staple of all popular reasoning in regard to medicines and diseases—demonstrate to him that the "propter hoc" is not by any means a legitimate issue of the "post hoc." After this, *therefore*, on account of this, is the short road by which all shallow and casual observers arrive at results which often influence a whole life; it is the near cut by which are reached most of those false facts which so much disfigure our professional literature, and so hedge in the minds of its votaries as totally to exclude in many instances its most palpable truths.

It is not on account of any novelty or any peculiar beauty of style, that we hail with such pleasure the appearance of this book, but from the acknowledged talents, the high position and the great age of Dr. Forbes, we have a right to expect that its value will be fairly estimated by the candid thinkers in the profession, who very honestly entertain opinions not at all in accordance with his. The simultaneous publications of two such books as Nature and Art, in disease, by Sir J. Forbes, and clinical lectures by Dr. Bennett, must open the eyes of some men to the fact that *in the theory and practice of their profession, a revolution is brewing, if indeed, it is not already round about us.* Shall we mount the wave and swell the current, or shall we attempt to resist it, and at *last go under*—for, to my mind, though gentle and stormless, it has a force as resistless as destiny.

A very few paragraphs will suffice to convey an idea of the scope of the work, and attract the attention of such persons as are disposed to prosecute researches in that direction.

"Besides, the principal object contemplated in the present undertaking, that, namely, of conveying to the junior members of the profession generally, juster views of the relations of Nature and Art to diseases, another object, only inferior to this in practical importance, has been constantly present to the writer's mind in carrying it out. This has been to prepare a work which, while fulfilling its strictly professional aim, should also be calculated to convey to educated and well instructed persons of all classes, such information respecting the real nature of diseases and the true characters and powers of the medical art, as they would be capable of comprehending and appreciating."

Unquestionably, this is a desideratum both to the people and the profession. If it is of importance at all to inculcate correct views upon the masses who are our patients, of what value is it that those views are embodied in volumes of eight hundred pages, expressed in hard words, which even the dictionaries ignore; or of what avail to them that very sensible papers are printed in good type, in the medical journals all over Europe and America? You may eradicate a vast deal of error and inculcate a vast deal of truth through the London Lancet, or the Medical News, and the people be none the wiser. If it is important to reach the people directly, address them in language which they understand, and publish through such a medium as is within their reach. I do not hesitate to assert that a series of articles from such medical men as have the confidence of their respective communities, addressed to the public journals throughout the United States, would go further toward the eradication of error, and the propagation of correct opinions, than all the purely professional treatises which have been published in the last ten years. The dreaded derogation from professional dignity which stares us in the face in a resort to the secular press is a mere illusion, and can only attach to the charlatan who selects this medium to puff himself, and beg an additional dollar.

The man who could best have done this thing for us a few years ago, was the venerable Coleman Rogers; the man who can best do the same thing to-day is the worthy President of the college of Surgeons and Physicians. The strong common sense and high scientific attainments of Dr. Miller, brought to

bear upon the transcendant absurdities of homeopathy, would shiver the whole thing into atoms. How many of the very intelligent readers of the daily press of this city have ever dreamed that the swallowing of these sugared infinitessimals was *demonstrably* absurd? They regard the whole matter simply as one of those scientific differences of opinion between professional gentlemen, with which they have nothing to do. Has any political paper in America ever published this precious little bit of science as thought out by the father of homeopathy, Hahnemann himself? "To obtain the hundreth degree of potency, mix two drops of alcohol with equal parts of the juice of the plant, and then mix this with ninety-nine or one hundred drops of alcohol, by means of *two strokes of the arm from above downward:* by mixing in the same way one drop of this dilution with one hundred drops of alcohol, you obtain the ten thousandth degree of potency, and by mixing a drop of this last dilution with another hundred drops of alcohol, you obtain the millionth degree. This process of spiritualization or dynamization is continued through a series of thirty phials up to the thirtieth dilution." Now can any sane man undertake to say how much of the original "juice of the plant" is contained in a drop of the thirtieth dilution? It should be reasonably strong, for one of the homeopathic maxims teaches that "the greater the dilution the greater the strength." This thirtieth potency however, is not by any means the ultimate force given to their infinitessimals—they are carried up to the two thousandth. There is a very interesting little table prepared by Professor Simpson, of Edinburg, and his reputation is at once a security for its correctness, and an endorsement of its value, by which is shown the amount of alcohol necessary to the various attenuations of a single grain or a single drop of the pure undiluted medicines.

1st Attenuation. One grain in one and a half tea spoons of alcohol. 2d. One grain in twenty-one fluid ounces. 3d. One grain in two thousand and eighty ounces. 6th. One grain in thirteen million gallons, or in two hundred and six thousand hogsheads. 7th. One grain in a lake of alcohol, with a volume of almost fourteen cubic miles; or in a lake fifty fathoms deep, and presenting two hundred and fifty miles of square surface.

15th. One grain in an oceanof fourteen billion cubic miles of alcohol; or an ocean forty-six thousand times greater than the whole waters contained in all the oceans of the earth. 30th. One grain in an ocean of fourteen septillion cubic miles of alcohol; or in a quantity sufficient to make one hundred and forty billion spherical masses, extending from limit to limit of Neptune's orbit, or in a quantity equal to many hundred spheres, each with a semi-diameter or radius extending from the earth to the nearest fixed star."

Now, to the uninitiated this looks like such a mass of fluid and such a mite of physic as would be fatal to all medicinal virtue, but the limits of human credulity are not yet reached. A vial dipped from this ocean of fluid possesses some very extraordinary qualities; a few strokes of the "arm from above downward," and such a change has come over it as was never dreamt of in our philosophy. "Frequent observation has convinced me that it is better to shake the vials only twice in order to develop the medicinal virtue of the drug just enough to affect the disease in a proper manner. By shaking the vial ten times as I was in the habit of doing, the proportion between the progressively developed intensity of action of the medicinal properties of the drug, and the degree of the potency was destroyed in favor of the former. The object of the dynamising process is to develop the intensity of action of the medicinal properties of the drug, at the same time as that action is reduced to a milder tone. Two shakes are sufficient to establish the true proportion between the two effects." * Wonderful, is'nt it?

Having had a glimpse now of the value of the fluid preparations, let us look at the very attractive little sugar pills which float so temptingly before the imagination of our nervous and knowing friends, male and female. We begin with a grain, take a grain of sulphur or mercury, or oyster shells, or opium, "pour this grain into a nonglazed porcelain mortar, having before covered the bottom of it with sand slightly moistened and triturated. Then you take thirty-three grains of sugar of milk, and mix them with the drug by triturating the mass with some force for about six minutes, scraping up that part which covers the bottom of the mortar, and also that which

* Foot note, pages 193-4, Hahnemann's Chronic Diseases.

adheres to the pestle; then you triturate again with great force for six minutes, without however adding anything new. This mass you scrape up again, for four minutes, add another thirty-three grains of sugar of milk, stir the new compound for a moment with the spatula, then triturate it for six minutes with the pestle, scrape it up for four minutes, triturate again with great force for six minutes, scrape the mass up again for four minutes, then add the last thirty-three grains of sugar of milk, and with this last added portion proceed as with the former. This is the hundredth potency.

"In order to prepare the one-thousandth potency, you take one grain of the degree one hundred (the preparation just noted) and add to it thirty-three grains of sugar of milk. Stir up this mass for a moment with the spatula. Then triturate it for six minutes, and stir up again for four. After this you add the second thirty-three grains of sugar of milk, proceed then as before; afterwards add the last thirty-three grains of sugar of milk, stir up and triturate again as before, and enclose the mass in a well corked vial.

"To prepare the one-millionth, you take one of the one-thousandth degree, and go through the processes of stirring and triturating in the same way as before, employing upwards of an hour for the preparation of each different potency." *

After all this hard and hot work, hard stirring, and hot trituration, the great Homœpathist adds, with the most sublime and refreshing coolness, that "for the sake of establishing a sort of uniformity in preparing homœpathic medicines, I never carry the process of trituration above the millionth degree." So much for the modus operandi by which these delightful little globules acquire their wonderful virtues.

Would'nt it be rather an interesting object to curious eyes if we could bring under the microscope the entire remnant of that original grain of sulphur after it has been stirred and triturated to the millionth degree? Would it not be worth the attention, *in a pecuniary point* of view, of some enterprising microscopist? I throw it out as a hint which may yet work its way into the mind of some medical Barnum.

Intensely ridiculous, however, as these infinitessimals are, they have furnished us a very ample field for the observation of

* Chronic Diseases, by Hahnemann, pages 191, 193.

that beneficent force, inherent in all vegetable and animal organization, which we call the vis medicatrix naturæ. It is the distinct and manful recognition of the workings of this power which gives peculiar value and character to this legacy of the venerable Forbes: "Ignorance of the power of nature to cure diseases, and an undue estimate of the power of medicines to do so, sometimes compel the practitioner to prescribe remedies when they are either useless or injurious.

"Ignorance of the natural course and progress of diseases which are essentially slow and not to be altered by any artificial means, often leads the friends of the patient to be urgent with the medical attendant to employ more powerful measures, or at least to change the means used, to give more frequent or more powerful doses. The same ignorance not seldom occasions dissatisfaction, and loss of confidence in those practitioners who, from conscientious motives, and on just grounds of art, refrain from having recourse to measures of undue activity, and from prescribing medicines unnecessarily; and leads to the continuance and employment of men who have obtained the reputation of greater activity and boldness, through their very ignorance of the true character and requirements of their art.

"Finally, it is the same ignorance of nature and her proceedings that often forces medical men to multiply their visits, and their prescriptions, to an extent not simply unnecessary, but really injurious to the patient." *

This of course cuts terribly into the pocket, and there lies the conscience of all that class of men who have made medicine a trade. Their name is legion, and they would very promptly vote down any suggestion which looked toward a system of medication which would reduce even by one the repeated visits, and the multitude of prescriptions out of which they build houses and add lands to lands. They are the men who approach the bedside with the conviction of a lever-power force residing in their gold pencils and square bits of paper, utterly overlooking the real living lever-power, which lies silently, but certainly, at work in the organization withw hich they dare ruthlessly to tamper. And this brings us distinctly to the point of view from which all systems of physic must be

* Nature and Art in Disease, pages 17, 18.

contemplated. Without a constant recognition of the existence and force of the vis medicatrix, we are enveloped in an eternal mist, through which it is impossible to see with such clearness as will justify us in saying this is the natural course, and legitimate termination of this disease. The vis medicatrix resisting and endeavoring to eliminate the morbific agency, gives us a distinct idea of relative forces, the proportionate power of which it is our business to estimate. If in our judgment the vis medicatrix is sufficient for the elimination of her antagonist, let us leave the case in the care of a power worthy to be trusted. If on the other hand we find that the forces of nature are about to be overwhelmed, *armed as we are by a knowledge of the processes by which nature does the thing*, let us stimulate and cheer her flagging energies by all the material aid in our possession; with a little help she may conquer terrible enemies in many a hard fought field, and she may now be victorious in this—let us help, but don't drive her off the field, and take the contest in your own hands. You may be a right glorious captain in this kind of warfare, but you *don't know as much as old nature about the manœuverings of the enemy.*

It would be agreeable to quote largely from this "legacy" of Sir John Forbes; but a passage here and there indicates perfectly the general scope of the work. Here is one of them: "The medical art, as it now exists, has much to boast of. Although our inquiries may tend to show that the estimate of its powers, both as to kind and degree, entertained by the public generally, and by a large majority of the members of the profession, is, generally speaking, much too high, it would be doing it great injustice not to place it as only second in importance to the arts which minister primarily and directly to the support and maintenance of human life. In some respects it is even the equal if not the superior of these; inasmuch as it can claim to the powers of preserving and continuing life when all other arts and appliances fail to do so; or can render life still comfortable and happy, when, without the aid supplied by it, the world would be but a scene of prolonged suffering. The inquirer who should undertake the study of diseases merely with a view to ascertain their quality, their various relations to one another, their causes, mode of origin, progress and event, without attempting in any way to influence

their manifestations and course, would be taking a most important step toward acquiring a kind of knowledge which is essential to the professor of medicine; he would not, however, be thereby entitled to the name of physician, nor would any of his proceedings come within the scope of the medical art. He would be merely a student or a cultivator of the natural history of disease: a natural historian, a man of science—the very essence of the healing art is to relieve suffering; and it is this which has given it its ancient name of the most noble and god-like of all arts." *

The book treats very largely upon the necessity of indoctrinating the popular mind with juster views of the natural course of diseases, and more sensible opinions in regard to the extent with which they may be controlled or modified by medicine. Upon both these subjects, even the most intelligent men are often utterly ignorant; nor is it any derogation from their perfect dignity and thorough respectability to tell them so.

Three score years is altogether too short a period to justify an attempt upon the part even of the most ambitious, to look into all things. The builder who thoroughly masters his art and improves the architecture of his country, either in its beauty, or its durability, will find his hands and his brains sufficiently taxed; the merchant who manfully grapples the ugly facts which are thrust into his face by the statistics of trade, and wrings a fortune out of commerce, should be satisfied that he has accomplished *his* destiny. So of the lawyer, who in the pursuit of his whole profession is willing to go down into the depths of and search for the sources of right, and in the practice of it will earnestly and with toil trace and guard and do battle for that same great principle which underlies somewhere all the issues between man and his neighbor, *he* surely has a field inviting enough and large enough without being tempted at all to trespass on ours.

Then that other high calling, which in its interests, its dignity, its thorough mental culture, its care for the present, and its solicitude for the future, of man; its utter and earnest devotion to all the interests of humanity, surely head and heart and hands of him whose feet are on this mountain, may all be pressed even to weariness in its legitimate service. If,

Pages 180, 181.

then, all these classes, which embrace certainly a large part of the educated thinkers of every community, are cut off from the possibility of knowing anything about a vocation which must be the single study of a life, what are we to say of the attainments in medicine of the uneducated and the thoughtless? Why this, that while they know absolutely nothing, they are the very persons who claim to know everything. Now while I repudiate utterly the idea of educating the people up to any minute acquaintance with diseases and their remedies, I hold that it is due to their best interests, and the higher respectability of medicine as an art, that they should be disabused of the mass of error which has been the growth of generations, and is traceable for origin back to the ages when mysticism and secrecy shrouded the cultivators of all occult sciences. Montaigne said three hundred years ago, that "the violent prejudice of custom imposed many things with absolute and undoubting opinion, that have no other support than the hoary beard and wrinkled visage of ancient use:" the thing is true to-day, and of us, boastful and arrogant that we live, stand, move and have our being in the very noon of the nineteenth century. Let us cease to claim that which *never was ours*, and by yielding to nature her unquestionable superiority over art, wipe out the reproach which taunts our noble profession with being a sham and a lie.

"To be, is in all senses better than to seem, for to the true man fame is valuable precisely in so far as he can solemnly affix to it his own signature." J. J. SPEED, M. D.

EXPERIMENTS ON STRYCHNINE AND OTHER VEGETABLE AND ANIMAL PROXIMATE PRINCIPLES.

Read before the "Society for the Advancement of Natural Sciences," of Louisville, at its sitting of March 21, 1859. *By* THOS E. JENKINS.

The writer having been employed in the month of September, 1855, to investigate, chemically, a case of suspected poisoning, a course of analysis was entered into, the result of which indicated the presence of strychnine in the contents of the stomach.

One set of reactions which pointed to this poison, was the coloration produced by oxidizing agents; these re-agents, although said by many chemists to be characteristic tests for strychnine, were not certainly known to be so by me, for the simple reason that I had not tried and seen their effects upon the various organic principles which were accessible to me. To satisfy myself upon this point, the following experiments were made.

It was not deemed necessary to use more than one of the oxidizing agents, commonly employed for the purpose, because the results produced are substantially the same whether the oxidation be produced by one or the other of them.

The manner of making these experiments was simply to mix on a white porcelain surface about the twentieth of a grain of the organic substance with one or two drops of white *concentrated sulphuric acid*, allowing them to remain in contact for a few moments, then testing with a small fragment of a crystal of *bichromate of potassa* drawn through the solution or mixture.

With many of the principles the sulphuric acid reacted powerfully with the development of beautiful and in several instances intense colors. These I have noticed, as well as those produced by the subsequent action of the bichromate of potassa.

In these experiments I have disregarded all changes except those resulting in the production of colors or their mutations.

In point of time, quantity of substance tested, and mode of operating, the experiments were all as nearly alike as possible.

The proximate principles which I employed were pure and nearly all in crystals.

The changes in color are given in the order in which they occurred.

Proximate Principles.	Color Produced by Sulphuric Acid.	Color Produced by Bichromate of Potassa.
Morphine,		Brown, green.
Narcotin,	Canary yellow,	Brown, dirty green, blue.
Ononin,	Light orange,	Brown, dirty green, blue.
Papaverin,	Purplish red,	Greenish yell'w, d'k green,
Peucedanin,	Lem'n y'w (evanesc't)	Dirty yellow,
Phloridzin,		Yellow, green, bluish.
Picrotoxin,	Orange yellow,	Yellow, green.
Rhein,	Intense red,	Muddy, green.
Piperin,	Bromish red,	Dirty, green.

Proximate Principles.	Color Produced by Sulphuric Acid.	Coler Produced by Bichromate of Potassa.
Salicin,	Rose red,	Brown, quickly green.
Santonin,		Yellow.
Strychnine,		Blue, purple, red, orange,
Thein,		Slight brown yellow,
Theobromin,		Slight brown yellow.
Caffein,		Light yell'w, green, br'wn.
Urea,		Yellow, no change.
Veratrin,	Intense brown red,	Brownish yellow, green.
Aconitin,	Brown,	Brownish green, bluish.
Anemonin,		Yellow.
Asarin,	Brownish red,	Brown, dirty green.
Atropin,		Yellow,
Cantharidin,		Yellow.
Codein,		Green.
Delphinin, *		Orange, broom, green?
Columbin,	Brownish yellow,	Brown.
Daturin,	Yellow,	Evanescent pink, green.
Digitalin,	Brown,	Yellow, green.
Elaterin,	Brown,	Brownish, yellow.
Emetin,	Brown,	Muddy yellow, green.
Gentianin,	Yellow,	Yellow.
Meconin,	Yellow,	Yellow, green.
Sanguinarin,	Red,	Brown.
Solanin,	Orange,	Yellow, green.
Cinchonin,		Light, green.
Quinin,		Light, green.
Quinidin,		Green.
Bebeerin,	Brown,	Brown, green.
Esculin,		Brown, dark green.
Amygdalin,	Rose red,	Brown, light green, blue.
Berberrin,	Brownish yellow,	Deep red, brown.
Brucin,		Bright, brick red, gr'n. yel.
Cetrarin,	Brownish yellow,	Brownish yellow, green.
Cubebin,	Beautiful red,	Yellowish green.
Hæmatoxylin,	Orange, d'k b'wn, red,	Dark, brown.
Indigotin,	Dark greenish blue,	Orange.
Kinovic Acid,	Yellow,	Pink, green.
Kinic "		Green.
Gallic "		Green.
Carbazotic "		Brown.
Uric "		Yellowish, green.

Nearly all left a green coloration on the spot after the lapse of twenty-four or forty-eight hours, owing to the reduction of chromic acid to sesquioxide of chrome.

* The result of one experiment.

These and other observations I have made in regard to vegetable proximate principles, convince me of their general and powerful deoxidizing properties, as well as the establishment of the fact that the "*color test*," or "*oxidizing test*," is not only delicate but characteristic, and consequently reliable. In reference to the delicacy of the "*color test*," I found that when one grain of pure strychnine was dissolved in four hundred thousand drops of distilled water, and one drop of that solution was allowed to evaporate to dryness on a glass plate, not only were the crystals of strychnine revealed by the microscope, but on the addition of a small drop of very white concentrated sulphuric acid, and the subsequent application of the point of a spicula of bichromate of potassa, the characteristic colors were brought out.

EDITORS MEDICAL NEWS:

Gentlemen—I have read with interest your editorial of March 1st, in which you speak of the action of the Medical Association, at its next meeting, upon the important and much agitated subject of medical education. The leading positions which you have advanced have struck me as highly important, and as deserving serious consideration. The uniform action of the association at its earlier meetings, if I remember rightly, consisted in recommending to the schools the adoption of a system, which should comprise two courses of lectures, each extending through a period of six months. Your suggestion is, that students should be required to attend *three* courses of *four* months each, both plans thus requiring the same amount of time to be devoted to collegiate instruction. It seems to me that a little reflection will convince all interested in this important subject, that your plan is the preferable one. As a medical teacher, after having for many years observed the working of our present system, and witnessed several attempts at an increase in the length of college sessions, I am satisfied that the general adoption of the plan of three sessions of four months each, would not only be a great step in advance of the existing mode, but would also be the most useful movement which could at this time be adopted. It seems to me clear, that three sessions of four months would be decidedly preferable to two

sessions of six months. We can not expect, under any system which could be sustained, to teach our students much beyond the mere elements of medicine, and it is certainly exceedingly desirable, that so far as we do teach, our instruction should be thoroughly fastened in the mind of the student. Our science, being so largely demonstrative, can not be properly taught, so that its facts will be remembered, without a repetition again and again of its demonstrations, and that this end will be much better attained by three instead of two sessions, is of course obvious. If the early recommendation of the Association should be generally adopted, the result would be, that the additional two months gained, would enable the teachers to give more extended and complete courses of lectures. But would that be as well for the student as the plan here maintained? It seems to me not. Take, for illustration, the department of anatomy. A six months' course would enable the teacher to give about one hundred and twenty lectures. He would be able to teach many things which he must omit in a shorter session. If he had access to a good museum, and could command the assistance of expert dissectors, he might demonstrate to his class every blood vessel and nerve which has a name. All the deep and numerous muscles packed away amid the vertebral processes, all those instrumental in the various and complex movements of the fingers, might be displayed and taught. All this would certainly be interesting, and as a matter of science, important. These things must all be learned by him who would become an anatomist. But are they proper subjects for the occupation of the time of a student who has but three years, and alas, too often much less time, in which he is to fit himself for the duties of a medical and surgical practitioner? In a four months' session, of eighty lectures, these minor topics must of course be omitted. But there certainly would be time enough to demonstrate fully and *minutely* those parts of anatomy which concern the practitioner directly, and is it not much better for the student to witness *three* demonstrations of the more important parts of anatomy than *two*, although in the latter case he may have had pointed out to him many things omitted in the former? Will he not be better qualified to enter upon his duties as a practitioner, after having been taught during *three* sessions the anatomy of

the viscera, that of all the surgical regions, of the bones, joints, and the muscles concerned in fractures and dislocations, than he will with but two courses of instruction in these most important subjects, although in the latter case, he may have listened to a description of, and possibly have seen every filament of the pneumogastric nerve, and followed the vidian in its windings through the labyrinth of the ear, and looked upon an elaborate dissection of the multifidus spinæ, trachelo mastoid, and other equally unimportant muscles? Every teacher and every student knows how difficult it is to acquire an *abiding* knowledge of the facts of anatomy, and how important it is that the demonstrations should be repeated again and again. The above remarks will apply with nearly equal force to the other departments.

I would not be considered an advocate of superficial education, or of narrowing the sphere of professional study. On the contrary, it seems to me, that the views here advocated, tend directly to a greater thoroughness of study, to laying a more solid foundation on which the zealous student will, after his graduation, rear a much more perfect structure than he would, with a preparatory course less thoroughly matured and digested, although it might embrace a somewhat wider range. In science, as in agriculture, it is not desirable to embrace any larger field than can be thoroughly cultivated within the time allotted. It is certainly much better that the medical student should be thoroughly instructed in a part only of the science, than that he should have skimmed over its entire surface.

Again, there is a rule in most of our schools which requires that the student shall have studied three years before he can be admitted to an examination. That this regulation is very nearly a dead letter in many schools is obvious, and even if the most careful attempts should be made to enforce it, means enough would be found in not a few cases of avoiding it. Practitioners too often know but little what their students are doing, and how they occupy their time. I am confident that in many cases the candidate who offers himself for an examination is indebted to the college lecture rooms for by far the larger share of his medical knowledge. There are cases where students virtually commence their professional education with an attendance upon a course of lectures, and when the session

is ended they seek a promising locality and offer themselves as candidates for medical practice. After continuing this career a few years, they again resort to a medical school, and, attending a second course of lectures, offer themselves for graduation. Doubtless such cases are rare, and it may be difficult to find a remedy for them. But believing that in the largest majority of cases the students are more or less profitably occupied with study during the recess of college sessions, it is certainly desirable to adopt some plan which will tend to extend their period of pupilage. If the student is required to attend *three* courses of lectures, but one to be attended during a year, the period of study will necessarily comprise nearly three years. Other reasons, as it seems to me, might be adduced in support of the plan of three sessions of four months each, but as I have already written more than I intended, I will close with the remark that the schools could have no selfish interest in such a movement, they would only be the gainers in the satisfaction they would enjoy in sending out their graduates better qualified than they can be under the present system, for as a matter of course the present system of fees would remain unchanged. Students who attend a third course of lectures are admitted to all our colleges without fee. It will be seen by comparing the plan here advocated with that recommended by the Association, that the only difference in the expense of the two, would arise from the necessity of one additional bill for traveling expenses, as the college fees would be the same, and the time spent in attending lectures would be the same in both cases. I hope this subject will receive the attention which its great importance demands, and that gentlemen of experience in teaching will express their views in the journals before the Association meets, for it is certainly very desirable that something should be done, that some steps should be taken in a forward direction. P.

Preservation of Subjects for Anatomical or other Purposes.—Take acetic acid, sulphate zinc, each ℥iv — ℥vj, water, ℔s vij. M.—Inject the carotid with this compound. By this means bodies may be preserved for two months during the greatest heat of summer, without disagreeable odor or discoloration of tissues.—*Prof. Budge.*

EXTRACTS FROM MINUTES, ETC., OF ACADEMY FOR ADVANCEMENT OF NATURAL SCIENCES.

NINTH REGULAR MEETING.

Mr. C. HALLER'S *paper on "The formation and occurrence of blue Iron Ore in the animal body," read by the Secretary.*

We find, says Mr. Haller, in the mineral kingdom, various combinations of phosphoric acid with the two oxides of iron, differing in composition and appearance. Among them are the green iron ore, delvauxite, limonote, etc., combinations of peroxide of iron, ($Fe_2 O^3$) with phosphoric acid, ($P O^5$) and water in various proportions. Neither of these minerals have been discovered until now in any of the normal or morbid products of the living animal organism; although to conclude from their composition we might infer their presence as the materials that form them, (Fe, O, PO^5 HO) are found almost everywhere in the animal body. It is different with the combinations of the oxide of iron (Fe O) with PO^5 which occur in inanimate nature as vivianite, mullicite, anglovite, etc. All these combinations (and this must be well considered) in a perfectly fresh state, that is so long as they have been in contact with the atmosphere, are colorless; but in contact with the latter they turn rapidly blue, at last deep indigo blue, probably on account of a higher oxidation of the Fe O. Long ago such phosphates of the oxide of iron were found filling belemnites and gryphites in the iron sand stone of New Jersey; after that in the bones of a skelton of a miner, buried probably for centuries in a mine of upper Silesia; at last in teeth buried in the earth. By this it is proved that the tribasic phosphate of lime (^3Ca O, PO^5) of the animal organism produces under certain circumstances in contact with ferruginous substances, white and blue iron ore. In the living animal body, a similar formation has never been observed.

In the year 1847, Prof. Rapp, of Tubingen, found in the stomach of an ostrich, a large lump of decomposed blood, which however had no putrid odor, and several large iron nails, which, together with the blood, were given to Prof. Schlossberger for investigation. The latter observed in various parts of the nails, especially where they entered the lump, a light, white tinge, which on exposure to the atmosphere turned light, then dark blue, and which showed under the microscope crystalline needles. Chemical analysis proved decidedly the presence of Fe and $Fe^2 O^3$ and PO^5, but not a trace of Cyanogen combinations. Prof. Schlossberger expressed already at that time the supposition that ferruginous animal pigments might usually be blue iron ore (Fe^2O^3, PO^5) and not ferro-cyanuret of iron (3 Fe Cy by 2 Fe^2 Cy^3—Prussian blue),

as was then the general belief, and his supposition was soon confirmed by two other cases, where meat suspended by iron hooks turned blue all around the iron, and in which no cyanogen combinations could be shown.

Prof. Friedrich, of Heidelberg, discovered in the human lungs, which were in a state of induration round glassy corpuscles at the side of other pearl-shaped crystalline corpuscles, apparently composed of small needles. Both gave under the microscope at time of first examination a bluish hue, and after longer exposure to air, turned deep blue. Chemical analysis showed that they contained Fe O and Po^5.

Dr. Berlin, in Amsterdam, found a short time afterwards in the dissection of a Penelope, in the coagulum, which formed so called cells, filled with corpuscles, similar crystals, as Friedrich, which indicated the same chemical reactions.

After it has been proved by these facts, that this animal vivianite originates in the blood, which contains a considerable proportion of Fe and Po^5, the supposition of Professor Schlossberger in regard to the ferruginous animal pigments is rendered plausible, and we may justly bring in connection with it the often blue color of pus. Late investigations seem also to give satisfactory results in this respect, as we find in Liebig's Annalen (April 1858) the statement that a distinguished young chemist, Dr. Schiff, of Bern, had recognized the pigment of blue pus with certainty as blue iron ore. Unfortunately it is not stated whether bandages saturated with iron preparations had not probably been used, and whether the pus turned blue only after exposure to air.

I do not venture to advance a theory about the formation of this animal blue iron ore. I shall only communicate a few experiments in regard to the production of this mineral. Becquerel used an apparatus consisting of a recurved tube, and filled one side with a solution of sulphate of copper, into which a copper wire was suspended; the other side was filled with a solution of phosphate of soda, with an iron wire; the two liquids were separated by moist clay. If he now combined the two wires, there formed on the iron small white crystals rapidly turning blue in the air.

Another experiment is by Bischoff, who proved that solutions of 3 Ca O, PO^5 in water containing carbonic acid, gave white precipatates of Fe O, PO^5 with solutions of Fe O, SO^3 or of Fe O, CO^2 in water containing carbonic acid; whether the latter turned blue he does not state; at all events, these hints should be regarded in future investigations; they prove that Fe O, PO^5 is a body, dissolved only with difficulty, which therefore can easily form in a mixture of the proper liquids, and a concurrence of proper circumstances. *When* and *how*

this salt changes into true vivianite can not be affirmed; still the time in which white iron ore can form from blood seems to be comparatively short.

The importance of the phosphates, and especially of the phosphate of iron in the animal organism, has lately been recognized in some conditions, and they have been used in so many diseases, especially in those that depend on weakness and decomposition of the blood, that it will serve as an excuse for me to have touched upon this subject. A consumptive patient lately told me that his expectoration was strikingly blue. He had for a long time used chemical food, and the cause was explicable to me, though not to him. I desired him to procure me some of the *blue* pus expectorated, but he has not yet complied with my wish. Should he do so, I shall not fail to institute a careful analysis, and to give you my results."

Mr. Thos. E. Jenkins then read a paper upon the test for strychnine and other vegetable poisons, which is published in another part of the Journal.

Editorial Department.

STATE MEDICAL SOCIETY.

In the present number, we publish the proceedings of the last annual meeting of this institution, and commend them to the thoughtful perusal of every physician in Kentucky. Not for the purpose of inviting these medical friends to anything specially interesting and satisfactory to them, do we urge this perusal, but rather to provoke a salutary self-reproach, which is one of the most legitimate incentives to amendment, as to any of the neglected duties of life. They will learn, it is true, from this record, that a sufficient number of their associates, were thoughtful and devoted enough to the interests of the medical body, to constitute a meeting, and maintain a respectable organization of the Society, and that in agreeable contrast to the conditions of most associations of the kind, there was quite a surplus in the treasury—a fact, the last,

however, to be credited, it is feared, rather to the parsimony, than the prosperity of the society. But, as a numerical representation of the profession in the state, they will perceive that the meeting was a miserable failure—a beggarly account of empty benches. The quality of the attendance was good enough—just such members of the profession as we should have expected, to make efforts and sacrifices in deference to their convictions of the value of medical organization, to the dignity, influence and usefulness of our art, were present; and, in the name of the profession, we take the liberty to thank them for being present; but hundreds of others, who, we know, entertain the same *convictions*, were not equally true to them, and were not present. It is these hundreds, or at least, some of them, whose self-reproof we hope to awaken by a perusal of the record of their delinquency.

Organization is the great modern element of power, and they who fail to employ it, in any commendable cause, are untrue to themselves, and to the cause whose interests are confided to them. Wherever this agency has been brought to bear upon the conduct of the affairs of medical communities, its effect has proved most beneficial. Not only has the profession thereby secured a more elevated and influential position in the public estimation, and has been able to do more for itself and for humanity, than it otherwise could; but, a far better inter-professional spirit and behavior have characterized the individual members of it, who are thus bound to each other, and to the whole body by self-imposed restrictions of honor and courtesy. It is impossible for us to establish and maintain, for the physicians of Kentucky, such an organization, except through the instrumentality of the State society. County and district societies must owe their existence, or efficient livelihood, to this as their source of power, and through it must execute whatever of action or influence they would contribute to the advantage of the common cause. We hope that many of the hundreds already referred to—we will not complain if all of them do so—will bear this fact in mind, and govern themselves accordingly in regard to the approaching meeting, on the 20th proximo. An agreeable and accessible place of meeting has been selected in the centre of the State, and the polite inhabitants of the incipient city of Leba-

non have signified their gratification at the appointment, and their readiness to facilitate, by every means in their power, the objects and interests of the meeting. Let us make it a full one, and we have no doubt that the hospitable people of that town will cause it to be remembered as a very pleasant one.

The general considerations at which we have glanced, ought to be sufficient to determine a very large attendance of the public spirited members of the profession, at our next anniversary meeting. But there are some special and temporary ones, pertaining to that occasion, which ought not to be without their force, in confirmation of the others. It is well known to the medical public, that the *American Medical Association* will assemble in Louisville, a few weeks after the meeting of our State Society at Lebanon. It is not only the city of Louisville and its medical corps especially, that is honored by this visit of our medical congress; but our commonwealth, and the great and respectable body of its practitioners, are equally involved in the compliment which it implies. No small portion, as it seems to us, of the agreeable duty of responding to this compliment, devolves upon the corporate representation of the physicians of Kentucky and State Medical Society. In what manner the recognition and response may be most suitably effected, we will not presume to advise or suggest, but would submit the matter to our brethren at large, as an additional motive for such an assemblage of the talent as well as the numerical strength of the profession, at Lebanon, as will assure such action in the premises as will be appropriate to the occasion, and honorable to the State.

TREASURER'S REPORT OF KENTUCKY STATE SOCIETY.

Cash received for dues, - - - - -	$149 00
Cash paid for distributing circulars, - - - -	7 00
Cash on hand, - - - -	$142 00

N. B. ANDERSON.

UPON THE REGENERATION OF BROKEN AND RESECTED BONES. BY DR. REINOLD HEIN, OF DANTZIC.

Translated from Virchow's Archives of Pathological Anatomy, Physiology and Clinical Medicine, by W. N. HAILMAN.

From the length of the article we merely give the writer's concluding resume and the results of his experiments, which consisted in about forty-eight resections and twenty fractures, made upon the bones of the extremities of doves and rabbits.

1. The regeneration of broken and resected bones originates generally in the tissues which belong to the group of capsular membranes, investing elastic ligaments, gelatinous, cartilaginous and osseous tissues.

This regeneration sometimes proceeds only from the membrane surrounding the medullary matter, and the periostum; in most instances, however, the fibrous fascia investing adjacent muscles contributes to this result.

2. In breaches of continuity by resection, regeneration of the bone may take place even if the periostum has also been removed, and then callus is produced by the investing tissues of the surrounding soft parts.

3. It is nevertheless important to spare the periostum, especially in necrosed bones, where generally fresh osseous tissue has already begun to form on the detached periostum.

4. Considerable effusion of blood impedes these processes.

5. Union by second intention, unless in complication with necrosis, differs but little from that by first intention.

6. One of the most important conditions for favorable union of resected bones is immobility of the parts, this may be obtained under many circumstances by encasement with plaster of paris.

7. If we comprise in the term callus, not only the changed tissues surrounding the injured bones, but also the new osseous parts uniting the old or supplying their loss, we may be said to have both a temporary and a permanent callus, as the latter, although formed in the former, is produced in a different manner, and differs likewise in struc- and nutrition.

PROCEEDINGS OF THE KENTUCKY STATE MEDICAL SOCIETY, AT ITS SEVENTH ANNUAL SESSION, HELD IN LOUISVILLE, APRIL 21, 1858.

The President, Dr. L. F. Owen, called members to order, and the proceedings were inaugurated with prayer by the Rev. Alexander Maxwell.

Dr. A. B. Cook, Chairman of the Committee, on solicitations for means to publish the accumulated transactions, reported that the committee had in discharge of its duty sent circulars to all delinquent members, with urgent appeals to them to forward their dues, so as to enable the Society to print their reports, but had met with inadequate success; the amount which had been forwarded would be shown in the Treasurer's report.

The Standing Committees were then called in the following order: On public Hygiene, Dr. S. M. Bemiss. Dr. Bemiss stated that he had overtasked himself in a report to the National Medical Association, and asked to be continued until 1859.

ON VITAL STATISTICS, DR. W. S. CHIPLEY.

Dr. Chipley said that he was not prepared to report. He had found on looking into the subject that it was much more vast and scattered over much more ground than he supposed. The facts he had collected up to this time were neither sufficiently authentic nor numerous to warrant any reliable deductions, and he held that more time must yet elapse, and more data be yet accumulated before he would be authorized to report on such a subject. Five or ten years hence he thought the period might possibly come when a report could be made which would possess the recommendations of a large collection of facts and reliable and scientific deductions. A motion was carried to continue Dr. C. on the Committee, and allow him to report whenever he thought the time he alluded to had come. Continued.

ON EPIDEMICS, DR. W. L. SUTTON.

The Secretary read a letter from Dr. Sutton, asking to be continued until 1859. Continued.

ON OBSTETRICS, DR. L. POWELL.

Continued by request of the Committee.

ON PRACTICE OF MEDICINE, DR. L. P. YANDELL.

The Committee was ready to report, and on motion it was made the special order for 4 o'clock, P. M.

ON IMPROVEMENTS IN SURGERY, M. D. GOLDSMITH.

The Committee was not present, and the call of his name postponed.

SELECT COMMITTEES.

On Medical Biography, Dr. C. H. Spilman. Continued.

On Relation of Disease and particular Geological Formations, Dr. R. Peter. Continued.

On Statistics of Lithotomy, Dr. D. W. Yandell. The Committee asked to be discharged, having after much effort and time failed to procure such facts as he had hoped to embody in his report.

On Anæsthetics, Dr. D. D. Thomson. Asked to be released from further prosecution of the subject. Granted.

On Puerperal Diseases, Dr. N. B. Anderson. The Committee was unavoidably absent, but the report was offered through the Secretary and accepted.

On treatment of Syphilis, Dr. D. W. Yandell. The committee was prepared to report, and on motion his report was made the special order for 5 o'clock, P. M.

On effects of Vaccinations when introduced into the system, while under the influence of small pox poison, Dr. H. L. Givens. In a letter to the Society, Dr. Givens stated that ill-health had prevented his readiness to report, and asked to be continued with the privilege of enlarging the scope of his subject, so as to include the influence of vaccination upon vital statistics. Concurred with.

On use of Catawba Wine as a remedial agent, Dr. J. T. Bradford. Continued.

On Sore Mouth of nursing women, Dr. Joshua Gore. Continued.

On motion, Drs. Powell, Breckinridge, and Wible were appointed the Committee on nominations. Dr. Chipley, as chairman of the Committee on ways and means, offered the following resolutions, which were made the special order for 2 o'clock, P. M.

Resolved, That the publication of the transactions of this association is indispensable to its existence and prosperity.

Resolved, That the Secretary be requested to forward to each member a statement of his account and earnestly press the payment thereof.

Resolved, That on the first day of June next the Publishing Committee be informed what amount of money is in the treasury, and that they proceed forthwith to select from the reports heretofore made, such as they may deem most important, and publish the same as far as the means in hand may warrant.

Resolved, That, after the distribution of such transactions as may be published under authority of these resolutions, the Secretary shall take steps to enforce the collection of all sums that may be due the association.

W. S. CHIPLEY.
S. M. BEMISS,
D. W. YANDELL.

AFTERNOON SESSION.

Drs. S. A. Brandeis, G. Cowan, and E. C. Bright were elected to membership.

The chairman of the Committee on nominations reported the following gentlemen for the offices prefixed to their respective names.

President, JOSHUA B. FLINT.
Senior Vice President, ETHELBERT L. DUDLEY.
Junior Vice President, C. P. MATTINGLY.
Recording Sec'y, S. M. BEMISS.
Cor Secretary, B. M. WIBLE.
Treasurer, N. B. ANDERSON.
Librarian, G. W. RONALD.

Signed, LLEWELLYN POWELL, R. J. BRECKINRIDGE, B. M. WIBLE. } *Committee.*

The special order was now taken up, and the discussion of Dr. Chipley's resolution continued until the hour for taking up reports, when a motion to postpone the further consideration of these resolutions until 11, A. M., of the second day, was carried.

Dr. D. W. Yandell read an abstract of his report on Syphilitic Diseases, with special reference to mercurial fumigation in such maladies. The report was received and referred to the Committe on publication.

Dr. L. P. Yandell next read his report on the practice of Medicine. Received and referred as above.

Invitations were extended to the Society by Dr. J. Lawrence Smith to visit the Louisville Chemical Works.

Also, by Dr. L. P. Yandell, on the part of the Faculty, to visit the Medical Department of the University.

Also, by Dr. D. W. Yandell, to visit the Stokes Dispensary.

A communication was received from the Kentucky School of Medicine, offering the use of their hall for the delivery of the annual public address by the retiring President, which was accepted, and 7 o'clock, P. M, assigned as the hour for the address. Adjourned to 10 o'clock, A. M., of the 22nd.

SECOND DAY.

Dr. W. W. Cleaver, of Lebanon, was elected a member. Upon motion the Society

proceeded to the election of officers for the ensuing year, which resulted as follows:

Joshua B. Flint, President.
E. L. Dudley, Senior Vice President.
C. P. Mattingly, Junior Vice President.
B. M. Wible, Cor. Secretary.
S. M. Bemiss, Recording Sec'y.
N. B. Anderson, Treasurer.
G. W. Ronald, Librarian.

The new President was conducted to the chair, and after thanking the Society for the honors conferred upon him, addressed some remarks to the members upon the importance of perpetuating the Association.

Dr. M. Goldsmith's Report on Improvements in Surgery, was called and made the special order for 12 o'clock, P. M.

Dr. L. P. Yandell offered the following resolution:

Resolved, That intemperance is one of the greatest evils of human Society, alike injurious to health and subversive of morals, and that it is therefore the duty of physicians, as the guardians of public health, to discountenance, by precept and by example, the habitual use of ardent spirits. Adopted.

The resolutions on the Committee of Ways and Means were taken from the table, and after some further discussion were adopted.

The Secretary moved that the Nominating Committee should appoint a publication Committee, which was carried, and Drs. R. C. Hewitt, S. M. Bemiss, and W. B. Caldwell, were appointed.

The following members were then appointed delegates to represent the Society, in the National Medical Association, for 1858.

Dr. C. P. Mattingly, Bardstown; Drs. S. B. Richardson, D. W. Yandell, Hewett, Breckinridge, and Bemiss, Louisville; Drs. Hopson and Ray, Paris; Drs. Chipley and E. L. Dudley, Lexington; Dr. T. N. Wise, Covington; Dr. J. T. Bradford, Augusta; Dr. W. L. Sutton, Georgetown; Dr. J. W. Singleton, Smithland; C. J. Walton, Hart county.

The Society being entitled to twenty delegates to the A. M. A., and there being but fourteen names offered, the president signed six blank certificates and directed the secretary to hold them at the disposition of any members of the Sooiety who may hereafter become delegates.

STANDING COMMITTEES.

On Public Hygiene, Dr. S. M. Bemiss, of Louisville; On Vital Statistics, Dr. W. S. Chipley, Lexington; On Epidemics, Dr. W. L. Sutton, Georgetown; On Obstetrics, Dr. L. Powell, Louisville; on the Practice of Medicine, Dr. W. B. Caldwell, Louisville; on Inprovements in Surgery, Dr. M. Goldsmith, Louisville.

SELECT COMMITTEES.

On Cesarean Section in Kentucky, Dr. F. E. Poland, Springfield; On use of cold water as a Remedial Agent, Dr. Hopson, Paris; on Stricture of the Urethra, Dr. D. W. Yandell, Louisville; On Frequency and Causes of Deaf Mutism in Kentucky, Dr. George Cowan, Danville; on Sore Mouth in Nursing Women, Dr. J. Gore, Bloomfield; On Connection between Epidemic Diseases and certain Geological Formations, Dr. R. C. Hewett, Louisville; On Epizootic Diseases in Marion county, Dr. W. W Cleaver, Lebanon.

The special order was then announced, and an abstract of Dr. M. Goldsmith's report upon fractures of the clavicle and femur was read and referred to the Publication Committee.

Dr. Wible announced a communication from the physicians of Lebanon to the State Medical Society, desiring that its next session should be held in that place.

Upon the call for question as to the acceptance of this invitation, it was agreed to resolve that when this Society adjourn it shall adjourn to meet in Lebanon, Ky., on the third Wednesday in April, 1859.

An invitation was announced to the Society to assemble at the residence of Drs. L. P. and D. W. Yandell, on 22nd, from 7 to 10 o'clock, P. M.

COMMITTEE OF ARRANGEMENTS.

Dr. Cleaver, of Lebanon, was appointed chairman, with power to select his associates.

The thanks of the Society were returned to the Trustees of the Public Schools, and the Faculty of the Kentucky School of Medicine, for the use of their Halls.

The Society then adjourned to meet on Wednesday, 20th of April, 1859, at Lebanon.

Although we have added to this number four pages extra, we are nevertheless compelled to omit from the usual report of the proceedings of the college of Physians and Surgeons, as well as a valuable contribition, that we may find room for the minutes of the last meeting of the State Medical Society. We wish to supply every possible means to direct the attention of our readers to the approaching meeting of this body, and to this end have devoted a large space in our present issue to its records. We will likewise send copies of this number to many physicians throughout the State, who are neither subscribers nor members of the State Society.

Semi-Monthly Medical News.

VOL. I. LOUISVILLE, KY., APRIL 15, 1859. NO. 8.

REPORT OF THE COMMITTEE ON SUITS FOR MAL-PRACTICE.

Submitted at the Fourth Annual Meeting of the Kentucky Medical Society, by C. H. SPILMAN, M.D., *of Harrodsburg, Ky.*

Continued.

The plain dictates of reason, as well as the settled principles of justice and equity, would indicate, that in all judicial proceedings, in order to a due administration of justice, the arbiter be thoroughly acquainted with the subject matter connected with that rule of right, of a violation of which the accused stands charged. This proposition appears so self-evidently true, that it would seem useless to offer any argument in support of it, did not the practices of the country afford evidence that it was wholly disregarded.

If in search of a sound and accurate opinion upon any question of difficulty and complexity, involving matters of science, you would of course refer it to those who have rendered the matter at issue an object of particular study and investigation. Upon any difficult, complicated question connected with mechanics, civil engineering, jurisprudence, chemistry, commerce, or agriculture, would you expect an enlightened opinion, or an accurate judgment from one who had not made these scientific pursuits his particular study? More especially when your investigation becomes necessary for the purpose of satisfying the ends of justice, would you seek those who have not only studied and exercised these pursuits, but such as possess the largest experience and most consummate skill. No man could rationally expect in a matter of judicial investigation, a sound and accurate judgment, or a fair, just, and enlightened verdict, where judge, jury, and counsel are all

profoundly ignorant of the matter in controversy. If, therefore, we have rightly apprehended the relation medicine bears to society; if to judge with accuracy and decide with wisdom upon the merit or demerit of any line of conduct connected with the exercise of a profession or a mechanical pursuit, requires great experience, long-continued observations, close reflection, and patient study; in a word, an intimate acquaintance with the nature of the science, or the art, on the exercise of which the judgment is formed, or opinion pronounced; we are admonished with what extreme caution and reserve, those who exercise the medical art, should be held amenable to the civil tribunals of the country, in matters touching professional responsibility.

But our records furnish clearer, more unequivocal evidence of the impracticability of obtaining a just and equitable award in such case, than the dim light reflected by *a priori* reasoning. I am persuaded it would not be difficult to show, that three out of every five of the decisions upon suits instituted for real or supposed cases of mal-practice in medicine, both in Europe and our own country, have been given in total disregard of the settled principles of the science, and in opposition to the dictates of reason and justice. Admitting it to have been guess-work with the functionaries acting in those cases, which we are bound in justice to do, it is a little remarkable that they have not guessed right oftener. I make this statement not in a spirit of ridicule. It is not a subject for trifling. I am not disposed either to cast censure or attach blame; nor would I be understood as wishing to detract from the ability, reputation, or standing of those whose province it is to dispense the retributions of law and justice. The entire court may be highly qualified and well skilled in all points coming strictly within their peculiar province, and to the study of which their position has required them to devote their attention. The case may be investigated with patience, deliberation, and great care, with a conscientious desire to do justice to all parties; and still the innocent be made to suffer, and the guilty go unwhipped of justice, for the manifest reason that the matter in controversy is not, to those setting in the case, a subject of intelligible adjudication.

You are doubtless ready to inquire if I would ask for the

physician, acting in his professional capacity, full and complete immunity from all civil obligation. Shall the profession occupy a position above all law, and independent of civil jurisdiction? By no means. It is admitted, it sometimes unfortunately happens, that a want of skill, fidelity, or due diligence in the management of a case, attaches a degree of criminality to the professional conduct of a physician, and discovers a want of proper sense of professional responsibility, which merits severe punishment, and demands restitution. Let it not be forgotten, however, that charges of unskillfulness, negligence, and inattention, have not unfrequently been prefixed, when no such dereliction in reality existed. What we ask, and what justice would seem to demand, is, the adoption of such judicial regulations as shall rescue the profession from the hazard of having the members subject to citation and trial before a tribunal ignorant of the matter in controversy; manifestly incapable, unless by some mysterious power of intuition, or keen transparency of mental vision, of estimating the merits of the charge; whether a wrong has or has not been done; whether a crime has or has not been committed, and wholly incompetent to render a fair, just, and enlightened decision in the case. Nevertheless, should any physician or surgeon, by ignorance, recklessness, unskillfulness, or negligence, exercise the profession to the detriment of any one, such physician should be held to a strict responsibility in damages, corresponding to the amount of injury done. This is clearly indicated as well by the dictates of reason and justice, as the sanctions of both natural and conventional law. The reasons for accurate and enlightened adjudication on this subject, are potential and two-fold. In the first place, the highest, most important concernment of a state, and indeed that for which civil government was avowedly organized, is to protect the lives, the health and the property of the citizens, and sedulously to guard them against injury and imposition; and secondly, by a wise, prudent, and moderate administration of government, see that its penalties fall not on the heads of the unoffending. More fully to subserve the cause of truth, therefore, and satisfy the ends of justice, I would deferentially suggest, as the most probable means of arriving at a fair, impartial and enlightened decision, that all judicial examinations on a charge

of mal-practice against physicians be conducted before a jury of their peers. If this proposition be not admitted to stand self-vindicated, it would seem at least a legitimate deduction from the premises. Medical art, like every human endeavor, is imperfect. Its limits, which constitute the exact measure of medical responsibility, are necessarily circumscribed. It will not be pretended that a medical man should be held responsible for that which is unattainable; which lies not within the compass of the art. It is manifest, therefore, that in order to the dispensing of just and equitable award for medical conduct, these limits should be clearly understood and accurately defined. The question then naturally arises, who is presumed to be capable of defining these limits? How shall it be known whether a failure should be attributed to professional delinquency, or incompetency in the art. How sad and dreary the anticipation, which is not an unfrequent lot of the physician, that the case he has in charge, despite of all the appliances that art can command, will tend inevitably to death. The non-medical public, however, unacquainted with the resources of the art, are liable to attribute the unfortunate event to criminal mal-treatment of the case, and thus the physician falls under censure where none is due. He is liable to be held accountable at the bar of public opinion, and before the civil tribunals of the country, not for professional delinquency, but for a failure attributable wholly and exclusively to incompetency, in the art of medicine, to meet the case in question. On the other hand, he may have been guilty of a neglect of duty, or a palpable breach of it. The failure may have resulted from a neglect to make such appliances as the known powers and capabilities of the art would have enabled him to command, and yet, for want of capacity on the part of the public to determine the exact measure of medical responsibility, the unfortunate event may be set down to the account of medical incompetency. It is manifest, therefore, that the responsibility of a physician, in the exercise of his profession, can not be estimated by non-medical persons; and the reference of alleged cases of mal-practice to a non-medical tribunal is ill-advised, unfair, and irreconcilable with the objects of law, and the ends of justice.

A gentlemen now living in the town of———, in this State,

some time since received a very severe injury of the hip joint by a fall from a horse. He was attended by two reputable physicians, who made an effort, and thought at the time, they had succeeded in repairing the injury. After the lapse of a few days, he, being dissatisfied, summoned a council of physicians, who finding the case rather difficult and obscure, and not being fully agreed as to its character, referred him to one of the most distinguished surgeons in the State. After a minute examination, he was pronounced a subject of dislocation of the hip joint; and consequently subjected to an operation, with a view to its reduction. Although he is still a cripple, and will probably carry his decrepitude to the grave, he and the public have cheerfully acquiesced in the result. This acquiescence, however, probably rests upon the extent, and variety, and ability of the instrumentalities employed in the case, and the fair and legitimate inference that every appliance within the compass of medical and surgical art had been called into requisition; for after the first unsuccessful effort at repairing the injury, a tone of dissatisfaction was marked, having rather an ominous squinting toward a day of retribution; and it is not at all improbable, had the case been left to the exclusive management of those first in attendance, such would have been the result; and it is no less probable, that a non-medical tribunal, unacquainted with the powers and capabilities of the medical art, the complicated, embarrassing nature of injuries of the hip joint, and their occasional irremediable character, would have rendered a verdict for damages. If any doubt exists as to the folly and flagrant injustice of the existing laws and usages of our country in regard to medical responsibility, it would seem that the case of Patterson against Hill & Burdett, tried in the Garrard Circuit Court, in the Spring of 1852, ought to satisfy the most skeptical. I have obtained the facts of this case, not only from one of the parties, whose detailed account of it I have in a letter accompanying this report; but verbally from other physicians who were witnesses in the case.

It was a case of fracture in the forearm, in the person of a daughter of said Patterson, resulting ultimately in permanent contraction of the fingers. A verdict of $250 was returned for the plaintiff by one of those ingenious manœuvers, too fre-

quent in judicial proceeding, where justice is made to yield to legal technicalities; for the evidence in the case exhibits no departure on the part of the attending physicians from the established rules of practice, and the most skillful application of means, so far as it was legitimately under their supervision and control. It appears in evidence, that Drs. Hill and Burdett attended the case until they supposed it might very safely be reposed upon the restorative powers of the system; and having given specific instructions as to its subsequent management, dismissed it. The deformity, however, the ground of complaint, in consideration of which suit was instituted, seems to have been the result of an unlooked for event; the supervention of erysipelatous inflammation, the formation of an ulcer upon the site of the fracture, and the detachment of a small slough. They were not called to visit the case again; but learning that this was the condition of his little daughter, they apprised Mr. Patterson of the danger, and gave particular instructions as to the position of the limb, and the appliances necessary to prevent contraction during the healing process. The admonitions however were unheeded, the instructions disregarded and the case neglected; hence the unfortunate event.

There are several inquiries naturally suggested by this case:

Firstly. Whether the occurrence of erysipelatous inflammation is not an occasional sequel to fracture, even with the most scrupulous medical and surgical precaution?

Secondly. Is it a matter of no doubt whether it resulted from a mal-treatment of the fracture, or a vice in the constitution, which rendered the fracture simply the unavoidable occasion of the inflammatory action?

Thirdly. To what degree of responsibility for the unfortunate event, would you hold the surgeon, who had not been called on to examine the case, and whose admonitions were unheeded, and instructions in regard to the necessary appliances wholly disregarded? A full and explicit answer to these inquiries, suggested by this case, which I will leave for you respectively to give, will indicate the estimate of medical responsibility, and the award for medical conduct, to be expected from the existing policy of our country.

(To be continued.)

THE NERVOUS SYSTEM.

By B. M. WIBLE, M.D.

(Continued from page 72.)

Before considering further the Diastaltic Nervous System, in the important part which it performs in the animal economy and in disease, I will endeavor to make some exposition of the ganglionic division of the Nervous System.

The reader may discover that in speaking of the encephalic and spinal centres, I have avoided designating them *ganglionic* centres. The great sympathetic nerve is also named ganglionic nerve, from its resemblance to a cord with knots upon it, and since physiologists have discovered that these knots are sources of nervous power, the entire assemblage of them, found without the encephalon and the spinal column, receive the name ganglionic system. The term ganglionic centre, however, has been applied to the vesicular structures within the cranium and spinal column. The medulla oblongata is spoken of as the ganglionic centre of respiration, the thalam optici as the ganglionic centre of common sensation, the tubercula quadrigemina as the ganglionic centre of vision; but such a use of the word is obviously improper, and calculated to produce confusion. When using the word ganglionic centre, therefore, I wish to be understood as referring to the ganglionic system or division of the nervous system, which I repeat, includes all those collections of vesicular nervous structure found without the cranium and spinal column, as the chain of ganglia extending along in front and each side of the spinal column, commonly denominated the great sympathetic nerve; the ganglia on the posterior roots of the spinal nerves; and all similar structures found attached to nerves in various parts of the body. These vesicular bodies and the nerves properly belonging to them constitute the ganglionic system. The ganglionic centres are everywhere blended with nerves from the medulla spinalis, or medulla oblongata. The nerves proper of the ganglionic system, when they can be isolated from those of the spinal, or cerebral systems, are found different in structure from them. They are of gelatinous consistence, and this peculiarity has enabled anatomists to trace their distribution, and to distinguish them from other nerves. The ganglionic centres supply nerves to the nonstriated muscles, to the

heart, uterus, intestinal walls, and especially to the blood vessels. Messrs. Todd and Bowman, speaking of the distributions of the great sympathetic, use the following language: "Clinging to the coats of the arteries, it follows them for the most part in their ramifications, and attaches itself to them somewhat as ivy does to a tree."

It has been ascertained that by irritating a ganglionic centre in the neck, there is an increased action of the heart; and by irritating the cœliac ganglion, the peristaltic action of the intestines is increased. This phenomenon has been especially observed, viz: that contractions of the intestines do not commence immediately upon irritation of the ganglion, nor subside upon the withdrawal of the irritation. A momentary interval after the excitation has been applied, is observed before the intestine commences to contract, and the contraction continues for a considerable time after the source of excitation has been withdrawn. I have often observed similar phenomena by irritating the exposed heart or intestine of a frog. Neither of these organs commences to contract immediately after irritating it; a momentary interval, and contraction begins and continues for a considerable time. Precisely analogous results have been obtained from irritating a ganglionic nerve, distributed to an artery, or, by irritating the artery itself. The artery does not contract at the moment the irritation is applied, nor cease when it is withdrawn; and the phenomena observed are similar to those seen in experimenting upon the heart and intestines.

Without going into any detail as to the anatomical or experimental proofs, in regard to the distribution of the ganglionic nerves, it will suffice for my purpose, to state that they are regarded as the nerves which supply the blood vessels, particularly the arteries and the capillaries, and as the agent which innervates the muscular or contractile walls of these vessels.

Our knowledge of the *course* of the nerve force through the ganglionic structures is very limited. We are unable to trace it as we can in the diastaltic, the distinct spinal system. We find, however, that the ganglionic system is intimately associated with the spinal, and that the nerve force appertaining to the latter is distributed to, and exerts an influence upon the former. The recent experiments and observations of Brown-

Sequard, Bernard, Vulpian, Schiff, and others, prove conclusively that excitation of the spinal cord produces movements of the heart, the intestines, and the blood vessels, similar to those produced by excitation of the ganglionic centres. Division in the neck, of what is known as the sympathetic nerve, is followed by local exaltations of temperature, and similar effects may be produced by certain mutilations of the medulla oblongata. It has been long known that division of the fifth nerve, after passing through the gasserian ganglion is followed by changes in the vascular structures of the eye, and that division before it passes that ganglion is attended with no such results; and the inference from these facts is, that the inflammation and destruction of the eye, which results from its severance from the ganglion, is owing to the deprivation of nervous influence to the blood vessels of the part. It has been ascertained through experiments and observations made by Vulpian upon the rabbit's ear, that irritation of certain ganglionic centres produces contraction of the caliber of the blood vessels of that organ, and that division of the nerves leading to them, or the destruction of the centres, is followed by dilatation. Some recent experiments by Bernard (*see Journal de Physiologie, Octobre*, 1858) upon the circulation of the blood through the sub-maxillary gland of a dog, show conclusively the influence of the nerves on the capillary circulation. He exposed the gland, and isolated the ganglionic and spinal nerves distributed to it. When he irritated the ganglionic nerve, there was a diminution of the flow of blood from the arteries to the veins in the organ; when the spinal nerves were irritated, there was an acceleration of the flow of blood through the same vessels.

The arteries are endued with the property of elasticity, the effect of which is to expand or dilate them; and they are endued also with a structure which contracts them; the former acts independently of nervous agency, and the latter require it. There can scarcely be a doubt that a function of the ganglionic system is to impart this necessary stimulus to the contractile tissues of the arteries and the capillaries, and that when the stimulus is withdrawn their property of elasticity expands them, and an augmentation of the quantity of blood in them follows as a necessary consequence. Stimulation or excitation of a ganglionic centre, I repeat, has the effect to

diminish the supply of blood in vessels to which its nerves are sent by virtue of the blood vessels contracting, and thus prevent the flow of blood into them. In this way Brown-Sequard and Schiff account for the syncopal condition of the brain in certain cases of epilepsy; some cause of excitation of the ganglionic centres, imparting to the *vaso motor* nerves of the encephalon, the power to contract the blood vessels of that organ, and consequently to diminish its normal supply of blood. On the contrary, when there is a failure of nervous influence to the vessels, their elasticity expands them and an augmentation of blood takes place. The interesting phenomenon of increase of temperature on one side of the head in certain animals, after division of the sympathetic in the neck is only to be rationally explained by the fact that an accumulation of blood takes place in consequence of their elastic dilatation.

It seems from the foregoing, that an office of the ganglionic system is to regulate the caliber of the blood vessels, and in this way to control the quantity of blood distributed to the organs. If these views are just, then the ganglionic system is veritably the *secretory* nervous system. It regulates the quantity of blood flowing into the capillaries where the vital and physical forces are in action, and which determine secretion, nutrition, and the various interstitial changes.

My next object will be to show that there is an intimate relation between the ganglionic and the diastaltic nervous systems. The anatomist can readily demonstrate the structural connection, but until recently physiologists were unable to prove the existence of a functional relation. Bernard, however, by exciting with galvanism the pneumogastric nerve, an esodic nerve, found that a function of the liver, the glycogenic action of that organ was increased by the galvanism. Bernard says: "The pneumogastric nerve conveys to the cerebro spinal (spinal) centres the sensations (esodic impressions, the pneumogastric being an esodic nerve) emanating from its periphery, the excitation which it transmits is in this case, centripetal and not centrifugal. And, indeed, after having cut the pneumogastric, if, instead of acting on the peripheral end, which process has no effect on the secretion of sugar, the excitation is made by means of galvanism on the end in connection with the spinal marrow, the glycogenic function is not

only not interrupted in the liver, but it can be even exaggerated when the excitation has been pushed far enough." It is now ascertained that the varying activity of the glycogenic function of the liver results from the varying quantity of blood circulating in the organ; the ganglionic nerve force being the agent, as I have attempted to show, which regulates the quantity of blood admitted into the capillaries.

The laws of action of the nerve force appertaining to the ganglionic system is not known (as before stated), but by some it is supposed that the nerve force, emanating from the spinal cord, is transmitted to the non striated muscles, modified in its properties by its passage through the ganglionic centres, the function of which is to retard or retain influences sent from the spinal centres; it appears to me, however, much more probable that the ganglionic centres are veritable centres, which originate nerve force, and which send off their own appropriate nerves, and that they are excited to action from influences transmitted from the spinal cord. Whatever may be true in these respects, still we are in possession of the important fact, demonstrated by Bernard's experiment, viz: that a nervous influence transmitted along an esodic nerve, to the spinal cord, thence through the ganglionic centres to the blood vessels, is capable of modifying the secretory action of an organ.

In conclusion, I cannot refrain from quoting in this connection, the following from the pen of Dr. M. Hall (Lancet, Sept. 1856): "It is not only obvious that the true spinal marrow is in reality the true sympathetic, but that the diastaltic system has an extension over the animal economy scarcely yet contemplated by the physiologist and the physician. It is in reality in this latter respect only second to the circulation of the blood itself. As the blood really describes a *circle*, the diastaltic spinal system describes a *cycloid;* as the blood diffuses its atoms in every minute space in the system, the diastaltic spinal system extends its influence over every one of those atoms! The blood undergoes its changes in the mathaematous, or blood changing (or capillary) channels placed between the ultimate branches of the arteries, and the adjacent roots of the veins; to these same points the diastaltic spinal system extends its wondrous influence."

I have not attempted to array all the facts which tend to

prove the existence of an *excito secretory* function, but I trust enough has been presented to show what is meant by the term. Dr. Campbell, as far as I can learn, makes no distinction between an esodic, and a sensitive nerve—a distinction essential to the comprehension of an excito secretory system, as enunciated by Dr. Marshall Hall.

(To be continued.)

History of the American Medical Association, from its Organization, up to January 1855. By N. S. Davis, M.D., *Professor of Principles and Practice of Medicine in Rush Medical College: Member of American Medical Association; Physician to the Mercy Hospital, Chicago; Permanent Member of the Medical Society of the State of New York; Fellow of the College of Physicians and Surgeons of New York; Corresponding Member of the New York Medical Association; Member of the Illinois State Medical Society, &c., &c.* To which is appended Biographical Notices, with Portraits of the Presidents of the Association and of the author. Edited by S. W. Butler, M.D. Philadelphia: Lippencott, Grambo & Co., 1855.

"To judge correctly of the success or failure of any given enterprise, requires that we know the real objects to be attained, and the methods proposed for their accomplishment."

This is the opening paragraph of Dr. Davis' "concluding remarks," and a very sensible paragraph it is. It will answer for a stand-point from which to contemplate for a moment the success or failure of the book whose title heads this article.

A great many books present themselves to us under such a variety of aspects, that we are at a loss to determine the precise objects which prompted their composition. Such books are manifestly beyond the reach of criticism, and must take their chances in the world, without a word of commendation or of censure from the pen of the reviewer. Not so, however, this book of Dr. Davis. It presents two very distinct aspects, each one sufficiently marked to justify a word from any journalist into whose hands it may fall.

As a history of the origin and early progress of the American Medical Association, it certainly possesses value, particularly to those members of the profession who have not access to the published transactions. The cost of these transactions places them beyond the reach of many who would very eagerly devote themselves to their study, while their very elaborateness of detail may deter others from an undertaking which has so large a look. That mere mountain top view of things, which is all that is sought and all that is desired by most men, in which is presented, as in natural survey, only the snow peaks and their eternal forests, to the utter disregard of the genial valleys, full of perfume and laden with the fruit which goes to nutrition, is here offered at a reasonable rate, and so condensed as not to detain the sight-seer too long in his rambles over the field of medical literature.

One of the prominent objects of the founders in the organization of the American Association, was the elevation of the standard of medical education. This subject is placed very prominently forward in the history, and Dr. Davis deserves credit for the persistency and earnestness with which he forces it upon the attention of his readers. From its birthday to its latest anniversary, the association has not for one moment lost sight of this favorite idea; and yet with very limited exceptions all its deliberations and resolves have been so unproductive as to suggest a suspicion of sterility in the soil which they have undertaken to cultivate, or of fatal defect in the seed which they have sown. Largely as the colleges may influence the popular mind upon this subject, it seems to us that they are not the source whence we are to look for that permanent upward impulse which is to result in what we choose to call a reformation, nor does that power reside in medical associations, whether national, state, or county; its origin is in the home, the office of the individual doctors who make up these associations. There is a vast deal of difference in any department of life, between an intellectual perception of the truth in a given proposition, and a *felt necessity* of the importance of that proposition. Very few of us would hesitate to vote for a very long series even of badly written resolutions which looked toward the promotion of a higher standard of preliminary education and medical teaching, and yet when we

withdraw from the atmosphere in which we saw so clearly the whole subject matter, and move about once again in that lower current which has for generations been rendered a little murky by an infusion of popular error and superstition, the sharp edges of that standard grow more and more indistinct, until presently the whole thing is enveloped in such mist as to present no feature which is at all attractive.

The wild and reckless son of respectable parents asks permission to read medicine in the office of the family physician, and though utterly devoid of character, and perhaps of education or talents, few of us have the courage to suggest that some other vocation would suit him better. Having stepped down from the platform whence we recognized so distinctly the necessity for educational reform, we promptly fall back into the old habit of fearing to give offense to respectable people, because, forsooth, we choose to guard with a little care our own respectability. Politicians talk a good deal about the want of backbone in many of their clan, which want is thought to disqualify the man for standing up to what they call his convictions; it would not be amiss if we should introduce a more rigid examination into that element of strength, as it enters into the character of our professional and office teachers.

The attempt to fix with any degree of exactness the specific degree of mental instruction which shall justify the profession in receiving students of medicine is evidently fallacious; it is specious, but merely specious. A youth, who, from a thousand causes may not have reached that standard, may yet possess all the numberless other qualities, energy, talents, character, which are an abundant guarantee of reasonable success; while the young man, who, by the patience of teachers, and the purse of parents may have been forced up to hic, hæc, hoc, may be deficient in all those elements which go to make a worthy soldier in the life-long battle which we wage against the hydra-headed enemy, disease. The youth who has a good head full of brains, sustained and steadied by a respectable backbone, though he never saw a Virgil, is surely better fitted to enter upon the study of medicine, than he who, utterly characterless, and afflicted with "mental rickets," has yet been educated up to the sublime dignity of "Tityre tu patulæ recubans sub tegmini fagi."

Dr. Davis has some very pertinent remarks upon this subject: "It is very easy for medical men to meet and declare in formal resolves, that the standard of education, both preliminary and medical, is *too low*, that the colleges ought to require this and that. But so long as they feel not only no *individual* responsibility in the matter, but return to their homes, and send directly from their offices young men to the colleges, who are grossly deficient in almost all the elementary branches of knowledge, they must not only expect to see their resolves unheeded, but they need feel no surprise if some wanton critic should liken them to the lawyers of old, who were accused of binding heavy burdens and placing them on other men's shoulders, while they themselves would not so much as touch them with one of their fingers." . . . . "Instead of regarding their institutions as mere schools for medical instruction, and demanding of them such action only as was calculated to render their courses more systematic and complete, they have been looked to for the practical execution of almost every specific recommendation made by the Association on the subject of education. But the colleges will continue to claim, as they have done, that the responsibility of exacting proper preliminary education ("and character") is with the profession at large, and that the place to demand evidence of it, is at the door of the office in which the pupil proposes to commence his studies."

But while we thus shift the chief responsibility from the colleges, and place it upon the shoulders of individual practitioners, can we, in honesty, exhonerate the colleges from censure in the premises. Can we sanction, in view of the whole subject, the secret wire-pulling and low electioneering by which young men are wheedled into the belief that *this* institution is superior to that? Can we justify the means by which a published catalogue shows a much larger class than anybody has been able to find in attendance? These things are said to be done by gentlemen who are the lights in the profession, and must be expected to have some influence upon the minds of young men passing through their period of pupilage. With what impressions do these young gentlemen look back upon their alma mater, when they remember how *some of them "got through,"* and how that published catalogue happened to have

twenty, fifty, a hundred more names than they ever believed to be in attendance? Are these some of the modes by which we are to elevate the dignity and enhance the respectability of a profession, in eulogy of which we are so wont to exhaust the languages, living and dead? Until the colleges shall succeed in wiping out the odium which attaches to these alleged practices, it is vain for them to attempt to throw off their share of responsibility in maintaining a low standard of attainments as necessary to entrance upon that theater on which they play so conspicuous a part. The demand which they make upon the individual members is thrown back with all becoming deference, and with the old injunction to take the beam, or mote if they so regard it, out of their eyes.

It will hardly be considered unfair in this crude and imperfect notice of what purports to be a history of the American Medical Association, to advert to a habit which seems to have become a part of that history. Dr. Davis introduces it after this wise: "The example first presented at the meeting of the Association at Boston, of setting apart one evening for a general entertainment provided by the local profession, was followed at Cincinnati, and was made the occasion of much social and intellectual enjoyment. The natural bounties were provided in great abundance and variety, but without the prodigality of expenditure and profusion of strong drink, which have since brought these social occasions into much discredit." Then of the succeeding meeting, which took place at Charleston, he says: "There, for the first time in the history of the Association, wines and strong drink were freely furnished as a part of the entertainment. Thus, a practice which commenced in Boston as a very simple and unostentatious collation, serving only as the occasion of a great and delightful social entertainment, became in Cincinnati a much more bountiful and costly public dinner, and, in Charleston, one still more elegant and costly, with the addition of those drinks which beguile the memory and intoxicate the brain." Of course we are altogether too young and too humble a member of the medical fraternity to utter a word of reproach upon the high privileges which the dignitaries in the profession may choose to regard as very innocent and becoming, and exemplary. We are too young for *that*, but we are not at all too young to

entertain some pretty decided opinions upon the subject of personal and professional decency, and one of those opinions is that this habit of "strong drink" as a part of the proceedings of an educated and intellectual body of gentlemen, met for the purpose of elevating in all its aspects, one of the noblest professions in the world, is simply disgraceful.

Dr. Davis has done himself credit, and the profession a marked service, by the clearness with which he has presented the subject of preliminary and mental education, as running through the various meetings of the Association, as well as by the frankness with which he has exposed the disgusting habit of providing and using intoxicating drinks at the social entertainments of scientific men, convened for the express purpose of promoting the very highest interests of humanity.

Having adopted this much space, very imperfectly it is true, to a consideration of the "History," as it bears upon the doings of the Medical Association, we turn our attention for a moment to that other aspect which we spoke of as deserving a word. And we confess at the outset, that we approach it with all the awe which is becoming in a man who unexpectedly finds himself in the presence of an unlooked for and utterly incomprehensible fact. We may break somewhat the real solemnity of the approach, by quoting again the first line of Dr. Davis' "concluding remarks": "To judge correctly of the success or failure of any given enterprise, requires that we know the real objects to be attained, and the methods proposed for their accomplishment." One object, as we conceive, in the publication of this history, has been to present in a condensed form the origin and progress thus far, of the Medical Association, the great work of professional elevation. The incomprehensible fact which stares us in the face, and at which we stand aghast, is this: that so clear a thinker, and so ready a writer as Dr. Davis, should leave us utterly in the mist as to the "object" in presenting the other aspect of his book. That the papers, of which the history is made up, were originally *anonymous* communications to the New Jersey Medical Reporter, may go far toward dissipating the mist which envelopes the thing like an Indian summer; but the aspect of it may be shown by a few extracts scattered here and there throughout the book, and found in rather a concentrated form

in the last article of the appendix, by a friend. On page 21, which is the fifth page of the book, we find that the New York State Medical Society referred a series of resolutions, in 1839, to its "corresponding committee, of which Dr. Davis was chairman. Through *his agency* the subjects embraced in the resolutions were urged upon the attention of county societies," &c. In due course of time, the idea of a "National Convention" began to ferment in the popular medical mind, and May 1846 was fixed upon as the time when it should set. "Besides the editorial notices, commending in general terms, the proposition to hold a National Convention, which appeared in nearly all the Medical journals of the country, during the year 1845, and which aided very much in rendering the movement successful, the New York Journal of Medicine, and the Collateral Sciences, published several communications from the author of the proposition, Dr. N. S. Davis," &c. After some remarks upon a communication from Dr. Ticknor, of Connecticut, we learn that "the communications of Dr. Davis contain a more extended consideration of the whole subject of medical education" (page 26). At a later period we learn that there was no manifestations of that "agrarian" spirit . . . which had been attributed to the New York Medical Society, and especially to Dr. Davis, the originator of the movement," (page 38). From page 43 we learn that certain views were "urged with much force by Dr. Davis, then a delegate from the New York State Medical Society." And then in the exercise of such sound judgment as one would reasonably expect in a body of educated gentlemen, we find that upon a subject of some importance, the convention of '45 appointed a "Judicious Committee," of which Dr. Davis was one. "The only paper read to the Association in Cincinnati, founded on original physiological investigations, was a short one by N. S. Davis, M. D., of Chicago, Illinois. It contained matter of sufficient importance to attract attention both in this country and in Europe." During the session of '52, the ratio of representation having elicited some discussion, the Medical Journals of the country were properly brought into requisition as media through which to influence the profession at large. "One of the leading articles which appeared during the year, was from the pen of Dr. N. S. Davis, of Chicago, and contained in the North-wes-

tern Medical and Surgical Journal for March, '53." At the meeting of '53 "The report from the committee of Medical Literature was presented and read in full, by Dr. N. S. Davis, of Chicago, Illinois. It contained a full review of the literature of the profession in the United States, for the year preceding the 1st of March, 1853. The writer not only claimed that we possess a national medical literature of our own, but pointed out its characteristic features, with valuable suggestions in relation to its cultivation and improvement." A number of questions are asked as to the objects and degree of success of this Association, which is rapidly becoming one of the institutions of this country. "Various attempts have been made to furnish answers in a satisfactory form. The most systematic of these is contained in the concluding chapter of a little volume, entitled the History of Medical Education, and published by Dr. N. S. Davis, in 1851."

Now, while we claim that these quotations indicate with wonderful distinctness one of the aspects in which the history presents itself to us, we contend that, as the production of a man of fine sense and liberal culture, occupying too, one of the high places in the profession, its object is utterly incomprehensible. Can it be that he regards this as one of the means by which the dignity of the profession is to be enhanced? Is this one of the modes of enlarging the respectability of a calling which claims for its members many of the highest attributes of human nature? Is this a logical result from all the labors of that great medical congress for whose origin Dr. Davis claims paternity, and over whose maturer life he watches with such marked solicitude? Is this an example to which we are to point our youth, and say, follow *that?* Shall a youth of parts, modest and proud of his *character*, be forced under such a standard as that, and be told to say, please measure me? The standard is too low, and doesn't reach round, nor touch in any of his parts, a real man! Is the "anonymous publication" to be appealed to as a sufficient apology for the "frequency with which my own name appears?" The *frequency* of the appearance is not obnoxious, but the manner of the appearance could never have crossed the brain-mirror of a modest man in the midst of solitude, talking only to the stars. Very respectable talents and very respectable culture may be

horribly disfigured and dwarfed by a vanity which overtops and outshows them all.

With decided approbation of the earnestness, the enthusiasm with which Dr. Davis presses the necessity for increased culture, preliminary and medical, on the part of young men looking to the practice of physic as an "end and an attainment," a proud and a high attainment, and with just as decided disapprobation of that offensive egotism which vitiates everything that it touches, and blights like a mildew many of the nobler elements of manhood, we dismiss the work, with the assurance, personal to those younger than ourselves, that after the very best efforts of our lives in the discharge of a mission second to but one, in its dignity and its beneficence, we will have but little ground for self-complacency, and certainly none for the display of that egotism which is at once unmanly and ungraceful. S.

Upon the Treatment of Pneumonia. By Dr. Brandes, of Copenhagen.—*Translated from Virchow's Archives of Pathological Anatomy, Physiology and Clinical Medicine, by* W. N. Hailman.

We have at Copenhagen two large public hospitals—the Frederic's Hospital, with 400, and the General Hospital with 500–600 beds. The former is rather a hospital for citizens, the latter for paupers; but as the Frederic's Hospital does not admit patients suffering with chronic diseases, these are found especially in the clinical department of the General Hospital, whilst in the first we find merely acute diseases. Besides, very old persons, and children below the age of six, are not admitted in the Frederic's Hospital. If we add to this the fact that the locality of the Frederic's Hospital may be called favorable, but that of the General Hospital unfavorable, it is easily uuderstood why diseases present different characters in the two institutions. Hannover has lately published a work, at which he has labored for several years with great diligence, entitled "Clinical Investigations." In this work there are statistics of diseases in the wards of the public hospitals of Copenhagen from 1843 to 1847. During this period the Frederic's Hospital received 802 patients with pneumonia, and of these 170, that is 22–3 per cent. died; in the General Hospital 334 suffered from pneumonia, of these 135, or 40–4 per cent. died. Another disease shows nearly the same number of patients, but the relation in regard to mortality is different—it is typhoid

fever. The Frederic's Hospital had during the above mentioned period 733 patients with typhoid fever, of which 136 died; in the general hospital 361 patients were treated, of these 67 died. Although the personal circumstances affecting the diseased were very different in the two Hospitals, the mortality was nevertheless the same—18–6 per cent. This seems to indicate that the individuality of the patient, his particular constitutional crasis, is of greater importance in pneumonia than in typhoid fever. I said, *seems to indicate*, for I have a great antipathy to conclusions which are derived from numbers thrown together in a mass. The treatment of pneumonia affords an example of this method of deduction.

Some colleagues who had spent a considerable time in Vienna, came back eight or ten years ago, full of admiration, as to how successfully pneumonia could be treated without blood-letting, by a merely expectant course; pneumonia had at Copenhagen been generally considered as a paradigm for the use of blood-letting. In the years 1853–4, I paid a six months visit to the General Hospital of Vienna. I was very anxious to investigate the results of this treatment, but my expectations of satisfaction were not realized. The course of the pneumonias seemed to me no more favorable than under the treatment with blood-letting and tartarized antimony; and besides, I thought my observations during that visit enabled me to assert with certainty that a more active treatment generally mitigates the disease more than an expectant one, a circumstance which would have been unimportant if the treatment without blood-letting had given better results. In comparing the statistics of the hospital for some years past, I found in the reports of 1850–51, that 472 patients had suffered with pneumonia in 1850. Of these, 19.35 per cent. males, and 21.5 per cent. females, had died. In 1851, the mortality in more than 600 cases had been 20.8 per cent. In both reports it is stated that the "therapeutics had been very simple, that blood-letting had been used 'very rarely' or 'scarcely ever.'" These propositions corresponded with the impression which I had received in the clinical department of the Vienna hospital, but that impression was quite different from the 7.4 per cent. of Dietl, by treatment without blood-letting.

In 1856, I was engaged as assistant in the clinical division, B, of the Frederic's hospital. Professor Fenger, who has the care of this division, uses generally moderate bleedings—usually the lancet or cups; if the pneumonia however is just in its beginning, he employs it more energetically; and if it has lasted for a longer time he does not resort to either; he also omits it in some very slight cases; besides he only gives pectoral ptisans, never tartarized antimony; in some cases senega,

and frequently towards the close of the disease uses vesication. With this treatment there died in 1856, of 55 patients, only 3, or 5.4 per cent. This treatment, then, seemed to me the best, and I thought it preferable both to the expectant and to the antiphlogistic method (blood-letting and tartarized antimony). However, in 1857, we had in the same division without change of method, a mortality of 31 per cent.; there died 27 out of 87 patients with pneumonia. The reason of this is evident. The two physicians that have the charge of the clinical departments of the Frederic's hospital, have arranged it so that the room in which the patients with delirium tremens are lodged, belongs alternately one year to the division A, and the next to the division B. In 1856 this room belonged to the division A, but in 1857 it belonged to the division B, Prof. Fenger's service. There were here in this year 95 patients with delirium tremens, of which 16 died; of these 16, twelve were cases of pneumonia combined with delirium tremens. This complication, which is always dangerous, was especially fatal in the summer and fall, as at that time there was an extensive epidemic of typhoid fever in this city; and it seems probable to me that this epidemic constitution has influenced these patients, in whom a dissolution of the blood is so general a phenomenon. Also, of the 27 pneumonia patients who died in 1857, 12 belonged to this category; 5 suffered with typhoid fever and pneumonia, 5 with pneumonia and organic heart disease, complications which, always dangerous, are in many cases absolutely fatal. But if in the same disease treated by one and the same method, we obtain in one year a mortality of 6 per cent., and in the next year 31 per cent., it shows that in therapeutics we can not rely upon statistics taken in a mass. According to what I have seen in these two years, it is now of little importance to me if Dietl believes splendid results have been obtained by the rejection of blood-letting, or if Bennett triumphantly opposes to Grisolle and others a mortality of less than 5 per cent. by a merely expectant method in the treatment of pneumonia. He may perhaps next year have a mortality of 20 to 30 per cent., as Dr. Flechner of Vienna, Dr. Schmidt of Rotterdam, and Dr. Bordes of Amsterdam, with Dietl's treatment, have had a mortality of 20, 22 and 23 per cent. respectively. If, however, I had to choose one of the two methods as a principle in the treatment of the usual cases of pneumonia, I should choose blood-letting. It seems dangerous to me to rely on the expectant method as a principle, because it may make the physician indifferent to a closer examination of the patient, as the treatment will be the same for bronchitis, pneumonia, and pleurisy. It deprives the physician of confidence in his art, and the patient of hope from any external aid. But I disap-

prove also of making the application of blood-letting a principle, and Dietl's talented work, which is an accession to science, seems to me faulty, so far as it derives too broad conclusions from bad statistics. I think, therefore, that in every single epidemic and in every single case of pneumonia, we must decide whether blood-letting is to be used or not.

If we want to make use of blood-letting, it is especially necessary to pay attention to the contra-indications to its employment; of these I shall mention one, the complication of pneumonia with delirium tremens. I have seen patients, with that complication, collapse so rapidly after a bleeding that it was evident that it had, if not caused, at least accelerated the death. In general, blood-letting must be omitted in pneumonia where ever there is a depraved anæmical constitution of the blood. In these cases, we frequently use the saccharum saturni. Prof. Christensen more especially makes use of it in the general hospital; he gives it in connection with quinine, one grain of each every two hours; if the cough is very violent, he adds opium instead of quinine.

A deceased colleague, Dr. Bramsen, has informed me that he had often used saccharum saturni for very small children suffering with pneumonia, and that it quieted them. I found this confirmed several times when I gave it in doses of $\frac{1}{2}$ grain to children from one to two years old. The most restless fell immediately after the first powder into a sleep, and this may have contributed to their recovery.

A termination of pneumonia not very rare among us, is, gangrene of the lungs. Dr. Silfverberg has tried to show that in this disease the expectoration has in the beginning, not a gangrenous but an almost pleasant myrrh-like odor; this passes into one resembling the odor of lye, and only after this is the gangrenous odor developed, perceptible sometimes in the cough several days before it is manifest in the expectoration. I have often perceived that aromatic odor, without, however, being certain that it was always followed by a gangrenous odor.

Another symptom which Dr. Silfverberg mentions as characteristic of gangrene of the lungs, is, that the bronchial respiration which is sometimes heard over a limited spot, may disappear, and return a few days afterwards.

In the last few years, Prof. Fenger has treated some cases of pulmonary gangrene in the Frederic's hospital with success. he is about to publish his method, and I shall speak of it in some future letter.

Copenhagen, Oct. 24, 1858.

Goitre in the Province of Perm. *Translated from the Medical Gazette of Russia.*—Among the Provinces in which goitre occurs endemically, there is, besides Irkutsk and Olonetz, also Perm. At the confluence of the Nisima and the Scheitanka, there lies in a marshy region, partly in the valley on both sides of the rivers, partly on a hill overgrown with wood, the village Nisimo-Scheitanskoe, consisting of about 200 houses. In this village, the reporter, Dr. Berkowsby, found one-half of the inhabitants suffering with goitre, which, in some, was of the size of a child's head. The soil of this region is marshy, contains much iron, and also copper. The surrounding mountains are covered with wood, particularly pines and cedars. The water of both rivers is of crystalline purity, without a trace of lime or gypsum; and only in spring, when the rivers overflow, clay, sand, oxide of iron, and a trace of copper are deposited. The valley is deep but broad, and free access to air and light unobstructed. Spring and fall bring dense fogs, and the winter is severe and long, but summer has many warm days, hence vegetation is luxuriant. The population is wealthy—there are no beggars—the poor and orphans are cared for by the government, and the sick are treated in private houses or in the hospital. Food is abundant, and consists of vegetables, barley, milk, eggs, fish, game, poultry, and pork; potatoes and wheat bread are seldom used, in truth only on festive occasions; rye-bread is the usual bread; the drinks are *quas* and *braga*, a kind of beer prepared from barley flour and hops. Alcoholic liquors are used *very* moderately. The wooden houses are spacious and clean, and frequent bathing insures personal cleanliness. The clothes are adapted to the rough climate. Neither scrofula nor syphilis, nor intermittent fever is present, but typhus occurs often, and still oftener catarrhal affections of the respiratory organs. The whole race is very healthy, stout, and hardened; their occupation exclusively mining.

Both sexes are subject to the goitre, still the number of diseased men is greater than that of diseased women. Children are seldom born with goitre; generally it shows itself at the age of puberty; it then increases until the climacteric years, and then remains without change. The largest are of the size of a child's head; sometimes they are larger, extending from the mammary process of both sides to the sternum, overlapping the chin about an inch, and consisting of three distinct hard and rough protuberances, each about the size of a man's fist.

Goitre seldom passes into cancer or ulceration. The expression of the patient is that of asthmatic persons, and indeed difficulty of breathing is so great, that one can very easily hear the deep rattling respiration of persons with large goitres at

a distance of ten paces. No cretinism or idiocy, or degeneration of the whole organization attends the disease; it is a local affection, and the subjects attain a comparatively old age. The disposition to goitre is hereditary; its development is encouraged by the rough mountain air, the labor, and climbing in the deep shafts; but why only in this village? The village Nisima-Outinkoe, 5⅓ miles below, and the village Tschernoistotschinkoe, 8 miles above, do not know goitre, although intermarriages are frequent. About 20 years ago the disease was more frequent; since that time it has decreased, probably because about 25 years ago, about 100 families, emigrants from other parts of Russia, settled here, and brought a new, healthier element, and that the surrounding forests have been cleared, and the adjacent swamps changed into gardens, fields, and meadows.

PROCEEDINGS OF THE COLLEGE OF PHYSICIANS AND SURGEONS, OF LOUISVILLE.

Reported by S. M. BEMISS, M.D., Secretary.

Tenth Meeting, November 23, 1858.

Dr. M. Goldsmith read from various authorities extracts to prove the identity of puerperal peritonitis and erysipelas.

Dr. Bemiss remarked, that the essayist had not, in his opinion, made the necessary discrimination between sporadic puerperal metro-peritonitis, and inflammation of the same organs. When modified by epidemics, prevailing at the time of its occurence, he desired to enquire if the member classed all cases of puerperal peritonitis, as erysipelas?

Dr. M. Goldsmith thinks the current belief of the profession is, that the puerperal female has contagious peritonitis; its characteristics are similar to those of erysipelas, its exsudates are identical, and the diseases are classed as identical.

D. Bemiss replied that the point he desired to sustain, was this, that those cases of puerperal peritonitis, which occurrd during prevalence of epidemics of erysipelas, were in truth, cases of erysipelas, bearing the same relation to the epidemic type, which determined their character that erysipelas of wounds did to such eipdemics. The uterus of the female who had just borne a child, was in reality in a traumatic condition, and might as naturally be attacked by that disease as wounds. He thought there should be a revision of nomenclature in regard to this point, and a distinction drawn between the terms applied to the puerperal peritonitis of epidemic erysipelas, and that milder and very different form of inflammation, which often

appeared in the parturient female when not subjected to such influences.

Dr. M. Goldsmith stated his willingness to give his adhesion to any change which would produce more precision.

Dr. Wible stated that puerperal fever was, as described by Gooch, Armstrong and others, an epidemic—it is a blood disease. The point was to ascertain the poison. He thinks it some retained secretion, not a foreign agent received as in small-pox. He thinks the treatment should be very early bleeding, then give opium in large doses. He regarded it so important, that the distinction should be made between metritis or metro-peritonitis and puerperal fever, as the nature, history and plan of treatment of the two affections were radically different; and he was unable to comprehend his professional friends when they spoke of puerperal peritonitis; he could not tell whether they referred to metro-peritonitis belonging to the adhesive species of inflammation, or to that more formidable disease described by Armstrong and Gooch—the diffusive puerperal peritonitis. He had seen but few cases of what he had been taught to regard as puerperal fever, although he had witnessed and treated many cases of metritis or metro-peritonitis. The latter disease he regarded as generally curable under proper treatment, whilst the former should be classed among the most fatal diseases.

Dr. Brandies had observed a peculiar odor accompanying puerperal fever—thought it due to the lochia, which was of chocolate color, of the consistence of a poultice, and exceedingly offensive. Had a case last spring which was ushered in with a violent chill. There were erysipelatous spots over extremities, which receded, and patient died.

Dr. Miller stated that he had used the lancet in a case of puerperal metritis, or metro-peritonitis, which had lately occured under his care. The case was sporadic, and was attended by an extraordinary enlargement of the uterus; so much so, that seven or eight days after delivery the uterus extended upward to umbilicus and downward to both iliac fossa. The abdomen was tender and tympanitic. The patient complained of nausea and oppression—had gaseous eructations—pulse 130—great gastric irritation. He propped the patient up by pillows, and resolved to push the bleeding to approaching syn-syncope. Twenty ounces were drawn before the patient complained of faintishness. The blood coagulated and formed almost all clot. The coat of fibrine was one-eighth of an inch in thickness. It was obvious that the bleeding made a very favorable impression on the patient's condition. The pulse was brought down, the tenderness was diminished, gastric uneasiness removed. He gave calomel and morphia, and kept it up for some

hours. Convalescence was now approaching. It seems to him, that notwithstanding all that has been said of arterial sedatives, blood-letting not only controls arterial excitement but rids the system of deteriorated blood passing through the circulation. It is especially applicable to cases of sporadic metro-peritonitis, and there is here absolutely no substitute. Of course in the erysipelatous form of puerperal fever, it would be different: and as to pneumonia, he could not express a decided opinion.

On motion of Dr. Miller, this subject was laid over as unfinished business, to be taken up at some future time.

On motion, Dr. Miller was requested to read, at the next meeting, a paper on the nature, treatment and extirpation of ovarian tumors.

ELEVENTH MEETING, November 30, 1858.

On motion, the special order was taken up, and Dr. Miller's paper on ovariotomy read.

Dr. M. Goldsmith inquired if there was elongation of the vagina in ovarian tumors?

Dr. Miller replied, that he had not referred to this point in his essay. To his memory in all his cases, and they amounted to a considerable number, he had found the uterus lower down than natural, pressed into the pelvic cavity; consequently, he would suspect a condition different from elongation, since the vagina was not upon the stretch.

Dr. Goldsmith said he inquired because Rokitansky said it was the case.

Dr. Bayless had operated, while in Missouri, on what he regarded as a favorable case for ovariotomy, and it was a favorable case; since the tumor was not large, there were no adhesions, and it was easily removed. He wished to mention the case and its result, so as to offer some suggestions for securing the artery. His patient died with all the symptons of hemorrhage, some twelve hours after the operation. The ligature at the post-mortem, seemed to be over the pedicle, where he placed it, and as he placed it; he at first thought the bleeding was referable to hemorrhagic diathesis on part of patient; there was however, no vessel divided in the incision of the abdominal wall, which required ligation. Upon further reflection he supposed the hemorrhage was from the artery of pedicle. He thinks the proceeding usually practiced for securing the pedicle, an extraordinary one, that of tying a ligature around the mass of cellular tissue, including artery, vein, and every thing in one bundle; the shrinking of these structures, would relax the hold of the ligature upon the artery, and bleeding would occur. A more rational proceeding would be, to cut the pedicle, and holding it between the forceps, select the artery,

and tie it as in ordinary operations; we thereby not only secure the artery with more certainty, but the ligature would come away sooner. In an operation he had previously performed, the ligature remained eleven months hanging out the external aperture of wound. Silver sutures had been suggested by Simms; Dr. Attee had recommended ecraseur. He would prefer Simms' method, to apply a silver suture to the pedicle, and cutting it off short, return it to the cavity. Dr. Rogers had, however, seen the ecraseur used in St. Louis. The pedicle was cut off and turned loose in the abdomen, and the operation successful.

Dr. Goldsmith stated that Marsh, of Albany, had had two out of five patients operated upon, to die of hemorrhage from pedicle. He wished to inquire of Dr. Miller, if a patient had undoubted encysted ovary, and it was found immovable from adhesions, it would be suitable for operation?

Dr. Miller replied that this condition would certainly be an obstacle to an operation, but not an insuperable one.

Dr. Hardin had no experience in these diseases, but desired to express his gratification at the able defense of the operation in the essay. He thought it a legitimate operation, and one that no competent surgeon should decline.

Pharmaceutical Department.

By T. E. JENKINS, Pharmaceutist.

A NEW AND PECULIAR THERAPEUTIC AGENT, NITRO GLYCERINE OR GLONOINE.

This substance was discovered by M. Sobrero, who states that it is an oleaginous liquid, and heavier than water. In composition it is similar to gun cotton, and is soluble in alcohol and ether, but insoluble in water. This substance has been experimented with in England by Mr. Field, and Drs. Fuller, and Harley, but said to have been previously employed as a medical agent in America. It is described as a very powerful medicine and "a most dangerous poison."

The experiments of the above mentioned gentlemen, go to prove that it certainly and speedily induced a state of perfect unconsciousness and insensibility, and has thus far produced no permanently baneful effect, and as it is a substance of such

unusual and wonderful effects, and one which promises to lend its aid in the treatment of disease, a formula is given which is said to be a safe and reliable process for its preparation;

Take of Glycerine (pure and of high spec. grav.), 1543 grs.
Nitric Acid (spec. grav. 150), - - 18 ozs.
Sulphuric Adid (concentrated), - - 18 "
Water, sufficient quantity.
Ether, " "

The glycerine should be added drop by drop to the nitric acid, which latter must be surrounded by a freezing mixture; it would be well for the sake of additional safety (*as the experiment is attended with the greatest danger to the operator*), to have the glycerine cooled down to about the freezing point of water, during its addition to the nitric acid. When the glycerine and nitric acid have formed a homogeneous liquid, which may be facilitated by stirring it constantly with a glass rod, the sulphuric acid should be slowly and cautiously added to it. After the lapse of a short time, the nitro glycerine or glonoine will separate and float as an oily stratum on the surface of the mixed acids, and may be separated by means of a proper funnel. An additional quantity may be obtained from the mixture by diluting with water. As the product is contaminated with acid it should be dissolved in the smallest possible quantity of pure ether, and repeatedly shaken with water, which will wash out all traces of acid and leave the glonoine pure, dissolved in the ether; the latter may be dissipated on a *gentle* water bath, leaving the glonoine free from ethereal odor and pure. For administration, it should be dissolved in Alcohol or ether, and the dose is stated to be from $\frac{1}{6}$ to $\frac{1}{2}$ of a drop of pure glonoine repeated every 15 or 20 minutes, until some effect is produced.

It is necessary in the preparation of this substance, to be very careful in reference to the temperature of the acids while the mixing is going on, and in truth the product should never be exposed to an elevated temperature, or to the air and light, for in the event of its being too highly heated, it will either take fire or explode, and when exposed to the air and light it will become altered in a manner similar to gun cotton. During the whole time that the mixing is going on, a thermometer should be immersed in the liquid, and it should never be allowed

to get above 32° Fahr., otherwise the operator must look out for the consequences.

The above process is substantially taken from the London Pharmaceutical Journal, to which Journal and the Medical Times and Gazette, of March 20, and April 3, 1858, the reader is referred.

CAUSTIC CYLINDERS OF GUTTA PERCHA AND CHLORIDE OF ZINC.

This preparation may be made after the following formula:

℞—Gutta Perch (clean), - - - - 4 oz.
Chloride of Zinc, - - - - - 2 "
Distilled water (warm), sufficient quantity.

Dissolve the chloride of zinc in the smallest possible amount of the warm water. Fuse the gutta percha in a porcelain capsule, over a gentle heat (just enough to liquefy it thoroughly, a greater heat will alter the properties of the gutta percha so that on cooling, it will not return to its original rigid condition), and throw in the concentrated solution of chloride of zinc, and stir in as thoroughly as possible so as to make the mixture, which is mechanical to a great extent, as complete as may be. When the moisture is judged to be all dissipated, allow the whole to cool gradually, constantly stirring, and when the mass becomes plastic remove it from the capsule and, fashion it into cylinders of such sizes as will adapt it to its various applications.

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By N. S. DAVIS, M.D., of Chicago. To which is added

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Drs. KNIGHT, of New Haven, CHAPMAN, of Philadelphia, STEVENS, of New York, WARREN, of Boston, MUSSEY, of Cincinnati, MOULTRIE, of Charleston, WELLFORD, of Richmond, and POPE, of St. Louis, and of Dr. DAVIS, of Chicago, the author. The whole edited by S. W. Butler, M.D., of Philadelphia. Full bound in muslin; price $1. For sale by

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Editorial Department.

We now reckon upon our exchange list every medical journal in the United States, with which we have solicited an interchange, except the American Journal of Insanity, the Ohio Medical and Surgical Journal, the Virginia Medical Journal, the Charleston Medical and Surgical Journal, and the Savannah Journal of Medicine. We have punctually forwarded our issues to these papers, but to this date have not received any acknowledgment of the courtesy. We have forborne to express complaint because we thought it probable that some of the editors of these journals considered it more prudent to wait until they had gained more knowledge of the character of the new intruder before compromitting themselves by acts of fellowship. But as they have now had full time and opportunity to make up their verdict, we do not feel it any longer our duty to maintain this one-sided civility, and will with this number cease to send them our journal.

To those of our cotemporaries who have so promptly and kindly welcomed us to their circle, we again express our most grateful acknowledgments.

A correspondent desires more particular information in regard to the preparation of the caustic cylinders of chloride zinc, referred to in a previous number, and also in regard to glonoine or nitrate of oxide of glycyl. Mr. Jenkins has, at our request, prepared formulæ for the preparation of both these articles, to which we refer our correspondent.

The mixture of the caustic with the gutta percha, is mechanical, consequently the quantity of chloride zinc to be infused is optional with the pharmaceutist, and must be varied to meet his indications for stronger or milder caustic effects. We have had no personal observation of the effects of glonoin, nor can we now call to mind any instance reported of its use in this

country. We have not observed the action of chloride zinc and gutta percha long enough to justify a report, but will be enabled before a great while to publish our own convictions of its efficacy, as well as the observations of several competent observers.

Mr. Jenkins can furnish our correspondent with required quantities of either of these articles.

The members present at the last meeting of the College of Physians and Surgeons of this city, had the gratification of witnessing the interesting illustration of the action of the heart and lungs as exhibited in the person of Eugene Groux, who, it will be remembered has congenital deficiency of the sternum. In this remarkable absence of an important part of the wall of the thorax, this case affords opportunity for the investigation of phenomena ordinarily placed beyond the sphere of such familiar scrutiny; then if we add to this the important fact, that the gentleman is endowed with a sprightly intellect, and has well acquainted himself with all the salient points connected with his singular deformity, and the advantages it offers to the physiologist, so as to be enabled to give, both by verbal expositions and experiments, rational demonstrations of the movements of the heart and lungs, we are forced to believe that no similar occasion for the study of these phenomena has been afforded the scientific world.

M. Groux has partially promised to be in Lebanon on the 20th inst., and present himself before the State Society, and has fully determined to be at the meeting of the National Association. Those of our readers who are especially interested in the study of the functions and maladies of the heart, may profit by this opportunity.

The March and April numbers of the American Medical Monthly have failed to reach us.

The Louisville and Nashville and Lebanon Railroads, will return members of the State Medical Society free of charge, upon presentation of cards of membership, which will be furnished by the Secretary at Lebanon.

Semi-Monthly Medical News.

VOL. I. LOUISVILLE, KY., MAY 1, 1859. NO. 9.

CASE OF INJURY OF THE HIP JOINT.

By W. C. SNEED, M.D., Frankfort, Ky.

"There are some facts, which of themselves, are of so great importance to mankind, or lead to such useful discoveries, that it would seem to be the duty of every one under whose notice they may fall, to render them as extensively public as it is possible.—*John Fothergill*, 1744.

The language of Dr. Fothergill, used more than a century ago, is as applicable to our times as it was to his own. Notwithstanding the great advancement made in the practice of our profession, and the many volumes that have since been written upon every subject connected with the healing art, cases still occasionally occur, of so rare and complicated a character, as to put the most experienced practitioner to his wit's end to manage them; and the exact descriptions of such cases are not to be found in any of our standard works. A case of this kind came under my treatment a short time since, the history of which I now propose to give.

In reporting the history of this case, I am free to admit that its true character was not understood until after it had progressed for a length of time, and when, if ever, it was too late to remedy the difficulty. But "Felix quem faciunt aliena pericula cantum!"* So I submit it to the profession, with the hope that good may result from its publication.

On the 24th day of May, 1857, I was called six miles from the city, to see Mr. T., a farmer, about 55 years old, who, the messenger said, had dislocation of the hip joint. I reached him within less than two hours after the accident, and found him suffering the most intense pain from dislocation of the left hip. My friend, Dr. Hawkins, of a neighboring village,

*Blundell.

had reached him before I did, but knowing that I had been sent for, he awaited my arrival before attempting to afford him any relief. We together carefully examined the joint, and readily agreed as to the nature of the injury. The patient, for his age, was a man of great vigor and physical strength. A knowledge of this fact induced us to put him under the use of chloroform, before any efforts were made at reduction. In consequence of the great pain he was suffering, we found it a difficult matter to produce complete anæsthesia. After bringing him as fully under the influence of chloroform as we could, "Jarvis' adjuster" was applied, and the force continued for over an hour before the dislocation was reduced. When that occurred, the peculiar jerk or snap was readily perceived by us, the bystanders, assistants, and by the patient himself. The limb assumed its proper length, the toes were no longer inverted, and flexion and extension of the limb could be made without difficulty. His sufferings, however, continued to be very violent, and we gave him during the night, free portions of tr. opium to produce ease and sleep.

The accident, we learned from the patient, resulted from "a piece of foolishness," as he expressed it, between himself and an old friend, who accidentally met on the premises of the patient. They were men of somewhat the same age, and had, previously, had playful passes of physical strength, in the earlier periods of their lives. When they met on this occasion, the patient made "a pass," as it is commonly termed, at his friend, with the view of tripping him in such a way, that the latter would fall over the former. To do this, he advanced rapidly up to his friend, who was also in motion, and when they met, Mr. T. dropped on his left knee, and braced himself, so that his friend would strike against him, and fall over on the ground. The friend not clearly understanding the motion of Mr. T., instead of falling over him, fell with considerable force on his back and hip. The knee being fixed on the ground, and the weight of the body being mainly on the left hip, when the additional weight of the friend was received, it pushed the head of the femur out of its socket, and lodged it on the dorsum of the ilium, where we found it.

So far, the case seemed to be one of simple dislocation of the hip backwards, and a little upwards; further details will

show, however, that it was one of a much more complicated and serious nature. The dislocation was reduced about sunset, and I remained with the patient during the night. He continued to complain of intense pain in the hip during the night, and by next morning, the swelling of the joint and the whole limb was very considerable. A careful examination of the parts, showed, that the limb was of the proper length, and the direction of the toes natural. I advised an opening dose of medicine, with such other directions as the case seemed to require, then left for home.

On the 4th of June, I saw the patient again and found him still suffering with severe pain in the injured hip joint, with extensive swelling of the whole limb. The joint and thigh were so much swollen as to render it impossible to feel the head of the bone, but from a tendency to inversion of the toes, a total inability to move the limb, with the knee of the injured side thrown behind that of the opposite, and some shortening of the limb, I had cause to fear that there was a more serious injury than that resulting from simple dislocation. A bandage was applied to the whole limb, with a view of reducing the swelling, hoping that relief would follow its application.

On the 16th I saw him again, and found the limb still very much swollen from the hip to the toes, with increased tenderness at the joint, and a total inability to turn the body in bed, or keep the injured limb in any position except that described at the last visit. The inversion of the toes, and the shortening of the limb, had further increased, and it was now pretty clear that the head of the bone had, from some cause or other, left the socket, and was gradually going back to the position it occupied before reduction was first effected. As careful an examination as could be made about the joint, owing to the continued swelling, revealed nothing positive as to the nature of the injury, though there could be felt (and the patient directed my attention to it himself), just above the upper margin of the cotyloid cavity, a hard substance of considerable size, which felt like either the head of the bone or a portion of the rim of the cavity had been drawn up on the dorsum of the ilium.

I visited the patient frequently during the succeeding two or three months, and as the swelling of the hip and limb gradu-

ally subsided, readily detected the nature of his injury. Without detailing further particulars in regard to the case, I will merely state, that it was one of dislocation, with fracture of the upper and posterior portion of the cotyloid cavity, and that after the dislocation was reduced, the contraction of the powerful muscles about the hip, caused the head of the bone again to leave the socket, where it now remains, and will remain during the natural life of the unfortunate sufferer. After detectiug the true nature of the injury, I made no effort at reduction again, believing that it would only subject the patient to a renewal of his sufferings, without affording him any permanent relief.

That the case was such as I have stated, is evidenced by the fact that when I first saw the patient, there were all the indications of a dislocation on to the dorsum ilii without fracture of the neck of the bone; this was clearly established by the shortening of the limb by at least three inches by measurement, before reduction, and inverson of the toes, &c.; and further by the audible snap or jerk when the head of the bone returned to its proper place, together with the lengthening of the limb, the power to flex and extend the same, and the normal position of the foot and limb after reduction. In the course of five or six months, the swelling of the hip and limb was so much reduced as to enable me to feel the head of the bone lying on the dorsum ilii, and also to detect the point at which the rim of the cavity had given way. The leg was then at least three inches shorter than the other, and susceptible of tolerably free motion at the joint. Up to this time, the general condition of the patient has slowly but steadily improved. He is now able to take exercise on his crutches, but has but little use of the injured limb. He says, when he puts the foot to the ground, or even on the round of a chair, there is a sensation in the limb as though the substances with which it comes in contact, were soft and yielding and his foot was sinking into them.

The points of interest in this case, are:

1. The rarity of such an injury. In an extensive reading of Medical Journals, and an access to a good surgical library, I have been enabled to find no satisfactory account of a similar injury. Sir Astley Cooper does not mention it in his work on fractures and dislocations; nor do the other writers on surgery,

whose works I have been enabled to consult, mention the accident at all.

2. The extent of the breaking up of the parts involved, before the head of the bone could pass out of its natural socket, and the difficulty of reduction.

3. The gradual return of the head of the bone to its former abnormal condition, with the continued swelling of the limb, and protracted suffering of the patient.

To have a clear understanding of the nature of such an injury, reference to the normal anatomy of the parts is important. This joint belongs to the class of enarthrodial or ball and socket joints, being formed by the adaptation of the head of the femur to the acetabulum of the os innominatum. These bones are connected by a very powerful capsular ligament, which again is completely covered by strong and thick muscles, under the influence of which the various motions of the joint are performed. The colytoid cavity, which receives the head of the femur, is admitted to be the deepest articular cavity in the body, the aspect of which is outward and very slightly forwards, as well as downwards. Each cavity is surrounded for about four-fifths of its circumference, by a sharp but strong lip or margin (supercilium acetabuli) directed from without downwards, forwards, and inwards, the deepest part of which is smooth, for the passage of the nerves, vessels, &c. Immediately within the margin of the acetabulum, there is a broad, smooth bone, covered in the recent state, by articular cartilage, seven-eighths of an inch wide at its lower portion, and from 1¼ to 1½ inches at its superior and external portion, and from one-fourth to one-half inch internally and superiorly at the pubis. The depth of this cavity is not uniform in its different regions, but corresponds in a great measure to the smooth bands of bone above described. Where this is broadest, the cavity possesses the greatest depth; and where it is entirely absent, the cavity is very superficial, as opposite the notch.

Cartilages and Fibro Cartilages. The only part of the acetabulum invested with articular cartilage is that which corresponds to the *facies lunata*. This layer is thickest at its external circumference, becoming gradually thinner as it proceeds internally. The head of the femur on the other hand is nearly

entirely incrusted with cartilage, which as is usual on convex surfaces is the thickest towards its center, where it is interrupted by the depression for the ligamentum teres, and becomes progressively thinner towards the circumference.

The margin of the acetabulum is surrounded by a fibro-cartilaginous ring about three lines broad, triangular in shape, with its base attached to the brim of the cavity, and its apex free. This, the colytoid ligament so called, clearly belongs to the fibro-cartilages of circumference, and is the counter part of the glenoid ligament in the shoulder joint. It removes the irregular character of the margin of the acetabulum, and is deepest where it corresponds to the concavities of the acetabular border. Its free border is sharp, directed inwards, at the same time narrowing the orifice of the acetabulum, and increasing the depth of that cavity. Its base and fixed margin is connected to the brim of acetabulum. Its internal surface is covered with synovial membrane, and embraces the head of femur. The whole extent of this fibro-cartilage, corresponds exactly to the convex margin of the facies lunata.

Ligaments. Of these, the chief is what is commonly called the round ligament or that first described by Vesaleus. It is a triangular fasciculus of fibres about one and a half inches long, having its base attached to the acetabulum, and its apex to the depression on the head of the femur. It is most advantageously placed for escaping injury in the various motions of the joint, and corresponds to the soft cushion in the excavation of the acetabulum, and its directions and attachments completely remove it from all danger in the movements of the joint.

The most important structure connected with this joint, is that of the capsular ligament. It is by far the strongest and largest capsular ligament in the body, though by no means uniform in its strength and thickness. It not only embraces the articulation, but also includes the neck of the femur, to the base of which it extends from the os inmominatum. Its fibres are variously directed from the os innominatum, to which they are firmly attached from the margin of the acetabulum to a considerable distance on the dorsum of that bone.

From this description it will be perceived to what extent this structure is involved in the formation of this joint, and the

great force necessary to the breaking asunder its attachments to the rim of the cotyloid cavity. The next important consideration connected with the normal description of this joint is its motions. They are mostly performed by the femur upon the os innominatum, and consist of flexion, extension, abduction, circumduction, and rotation. The muscles which act upon this joint to produce motion are mainly the rectus femoris, psoas and iliacus, the obturator externus and pectineus, the quadraius femoris, gemelli, pyriformis and obturator internus with the glutei. These constitute a class of the strongest muscles in the body, and brought into violent force by any unnatural cause, often result in the most serious injuries to the joint.

In slight flexions of the joint the head of the femur revolves upon its axis in the cotyloid cavity, relaxing the anterior portion of the capsular ligament, but rendering the posterior proportionably tense. If this motion he augmented to any considerable extent, the capsular ligament is relaxed to a greater degree anteriorly, whilst posteriorly, in consequence of the distance between its two points of attachment being increased, it is very tense, and rendered convex by being stretched over the head of the femur, which is now very prominent in this situation, resulting from the altered relations between it and the acetabulum. The position of the hip joint of Mr. T., at the time he received the injury, was nearly that just stated. His knee was upon the ground, his body thrown forward in such a way as to completely relax the anterior capsular ligament of the left hip joint, throw the ball of the femur against the posterior portion of the acetabulum, and put the posterior portion of the ligaments upon their utmost stretch. This being his position, when an additional weight of a hundred and fifty pounds, came suddenly, and with great force upon the hip, serious injury was almost inevitable; and in his case, instead of simple dislocation outwards and upwards, over the rim of the cavity, a portion of the latter was broken off, and the head of the bone passed over the scabrous surface, tearing up the attachments of the ligaments, rupturing blood-vessels, nerves, periosteum, muscular attachments and all, in its progress. This extensive breaking up of tissues, will readily account for the violent symptoms which followed; and the slow return of the

head of the bone over the injured parts will readily explain the long continued suffering of the patient, and the utter hopelessness of ever giving him again any valuable use of the joint.

Of the accidents to which this joint is liable, fractures, sprains, contusions, and dislocation, are all common, and the os innominatum, and the acetabulum, are frequently the seat of serious injury. But fracture of the acetabulum is so rare an accident, that but few surgeons have ever had an opportunity of seeing a case. The superior and back part of the cotyloid cavity, which overhangs the head of the femur, which was called by Soemmering the supercilium, is occasionally broken off, as occurred in my patient, and a dislocation upwards and backwards shall occur. No class of accidents, I think, would be more likely to be mistaken, and certainly none more difficult to manage, even if its true nature was clearly apprehended at the time of its occurrence; and I believe, in every case, that might occur, permanent lameness would follow. In such cases, the luxation of the hip might be reduced without more, or as much difficulty as in common dislocations, but displacement must sooner or later again recur. In symptoms and effects, the cases have a strong resemblance to the congenital luxations of the femur.

The following case reported in the Cyclopædea of Anatomy and Physiology, by Dr. Todd, is the most satisfactory of any which I have been able to find in my researches upon the subject:

"T. V., æt. 25, on the 4th October, 1834, received a severe injury of the right hip joint in leaping across a ditch, having alighted with force upon the right leg. He fell immediately, and was unable to rise from the ground, or to walk or stand when raised. When the patient was supported in the erect posture, he had the ordinary symptoms of dislocation of thigh bone, upwards and backwards, on the dorsum of the ilium. No crepitus was discovered. On the following morning, an extending force having been applied by the pulleys, the head of the bone resumed its natural situation and the deformity of the limb disappeared. When the patient was rested, on the following morning (the 6th), it was found, that during the night, the head of the bone had started from the acetabulum, and that all the former signs of the injury had reappeared. On

the 7th, the displacement was again reduced. While the bone was yielding to the force of pulleys, the writer had the palm of his hand pressing on the great trochanter. As this last advanced slowly towards the acetabulum, he was sensible of a rough grating sensation, which was communicated to his hand, and gave him the idea as if the head of the bone were dragged along a scabrous rough surface. The case proceeded favorably until the night of the 10th, when owing to the disturbance occasioned by the action of a purgative medicine, the dislocation recurred a third time. It was observed, that, although when the patient was supported out of the bed, the foot was inverted, still the toes could be somewhat everted. An accurate examination being now instituted to ascertain whether a fracture existed, a distinct crepitus was discovered at the upper and back part of the acetabulum. The crepitus and frequent recurrence of the displacement, rendered it sufficiently obvious that the brim of the acetabulum had been broken in the above mentioned situation. The bone was a third time restored to its place, and a strong band placed around the pelvis."

"The same patient was admitted into the Richmond Hospital, in 1836, at which time he was unable to walk, except on crutches. The injured limb was one and a half inches shorter than the other. When standing, he rested it upon the points of the toes, the heel being drawn upwards, but a slight degree of extension was sufficient to restore it to its natural length; and when the man was lying in bed, there was hardly any difference perceptible in the length of the two limbs. The breadth of the injured hip was occasionally greater than that of the sound one, and the head of the femur could be pushed upwards easily, and, of course, it always ascended when the patient endeavored to support his weight upon it; and in many motions of the joint, the rubbing together of the broken surfaces was distinctly audible."

There is considerable resemblance in the two cases I have now given, the first, the only case of the kind I ever saw, and the second the only one I have been able to find recorded. The length of this article is already too great and forbids further remarks on the nature of such cases.

Frankfort, March, 1859.

CONCUSSION OF THE BRAIN.

By JOHN M. KITCHEN, M.D., Indianapolis, Indiana.

A case of this kind which came under my observation several years ago, and which interested me a good deal at the time, I have thought might now possibly interest some of the readers of the NEWS, if related briefly.

Early one cold winter morning, a brakeman on a freight train, started upon a run over the tops of the cars for the rear one, in order to get his overcoat. The train was rapidly approaching a covered bridge, which spanned a broad river, considerably above its bed, and just as the man was about jumping from one car to another, the back of his head was struck by the bridge, and he was thrown violently against the sharp edge of the next car, his forehead striking; he then fell between the cars, was held fast to the rail a moment by the passing wheels, and at last dropped about thirty feet, upon a quantity of rough gravel. Although alive when I saw him, an hour or thereabouts after the accident, it seemed scarcely possible for him to survive. The car wheels had passed over the fore and middle fingers of the left hand, and over the right fore arm, about its middle, crushing them terribly. A large flap of the scalp was also stripped backwards from over the frontal bone, and the back of the head was badly battered, yet, upon close inspection, no fracture of the skull could be detected. There was such a confusion of symptoms, too, in regard to the brain, that it was impossible for me to tell whether it was suffering from compression or a violent concussion, and two other physicians, clever, intelligent gentlemen, who saw the case with me, were as much puzzled as I was; however, the conclusion was finally arrived at, that he could not possibly get well, that such complete insensibility and perfect unconsciousness were not likely to be recovered from, and that he might as well have an amputation as not, after which he would be ready to welcome any thing like a favorable symptom.

I accordingly amputated the injured arm by the flap method, which consumed but little time, and but little blood was lost by the operation; the stump was dressed, the crushed fingers properly disposed of, and the wound on the forehead attended to; during all of which the patient exhibited no more evidence of sensibility than if he had been under the influence of chloro-

form, and of course he would not have been aware of the fact "had his feet been tickled," a serious sign which is mentioned in the books, neither would he have heard a clap of thunder, or, in borrowed language, would the noise of an earthquake have succeeded in rousing him from his lethargy. By and by, however, there came a favorable symptom; he vomited for the first time, and shortly after that another favorable symptom was observed—he swallowed a little water; but unconsciousness still remained, and a severe pinch would not disturb his sensibility in the least. A brisk purgative, which was administered about thirty-six hours after the accident, caused involuntary evacuations from the bowels, and he likewise discharged his urine without having a knowledge of it. Aside from the vomiting and the ability to swallow, no change worth relating occurred until the fourth day, when as the stump was being dressed for the first time, rather roughly perhaps, it seemed to hurt him, to touch him in a tender spot; but a loud shout in his ear caused him to manifest no sign whatever of consciousness. On the sixth day, after making the same test, he would give a sort of a grunt. Finally, on the seventh day, just after I had concluded dressing the stump, he suddenly opened his eyes, looked around the room a moment in a confused manner, and gave utterance to the very idea that occupied his mind when knocked senseless, precisely one week previously—"Where in the dickens is my overcoat?" The scene was ludicrous enough, and the effect was visible on the countenances of all present. His intellect was perfectly clear from that time; but of course the preceding week was a perfect blank to him. He rapidly recovered, and I saw him not long since acting in the capacity of a switch tender.

Should the above simple sketch attract the attention of even one young member of the profession to the difficulty, nay, sometimes the absolute impossibility of distinguishing between concussion and compression of the brain, I will be amply repaid for the little trouble I have had in giving it.

A limited number of copies of the Report on influence of Marriages of Consanguinity upon offspring, by the Senior Editor, are for sale by Maxwell & Co., Main street.

HYPOPHOSPHITE OF QUININE.

A New Remedy Proposed by J. Lawrence Smith, M.D., *Prof. of Chemistry, University of Louisville.*

The recent recommendation by Dr. Churchill of the use of the hypophosphites in the treatment of phthisis, is now undergoing a general test by the medical profession; and so far as reported upon, there appear to be different opinions in regard to their efficacy. Some speaking of them with much praise, while others see but little benefit from their use. In one thing all agree—that no injurious effect arises from their administration.

From my own observation and inquiry, patients using the hypophosphites, either in their solid form or their syrup or glycerole, have experienced marked relief from many of the annoying symptoms attendant upon phthisis.

The special object of this note is to bring to the attention of the medical profession a new combination of hypophosphorous acid, which I have lately had made at the Louisville Chemical Works, namely, the *hypophosphite of quinine.*

It was first made by adding an excess of recently precipitated quinine to a hot solution of hypophosphorous acid, and on cooling, the salt crystallizes out in beautiful silky tufts, which, when dry and broken up, resemble asbestus in appearance. The method adopted and proposed for making it on a large scale, is by double decomposition; using the sulphate of quinine and the hypophosphite of baryta, the operation must be conducted so that there shall be no excess of either salt in the solution; the solution is filtered from the sulphate of baryta, concentrated and allowed to crystallize, which it does in the manner already mentioned.

The salt thus obtained, is in delicate fibrous crystals, soft to the touch; they are of a beautifully silky luster, very soluble in hot water; one ounce of cold water at 60° Fahr. dissolves 8 grains of the salt. When heated, it loses its water at about 230°, and at about 300° it turns brown and melts.

Proposed Uses.

If the preparations of hypophosphorous acid are useful in

phthisis and analogous diseases, then its combination with quinine must be beneficial in those phases of these diseases where quinine is at all recommended. I would therefore suggest its use in the hectic fever of phthisis; also as a tonic in the same disease; also in the various forms of cachexy where quinine is used.

Nor ought its use to stop here, for, owing to its solubility in water, it can be readily administered in that menstruum (say 5 grains to the ounce of water), thus becoming useful for children, and also in compounding, where the presence of an acid is objectionable, as is now necessary in dissolving the sulphate. In the form of pill it would be more soluble in the stomach than the sulphate.

With these few hints I leave the article to the medical profession to be fairly tried, feeling confident that its solubility alone will be sufficient to make it an important addition to our materia medica.

Obstinate Chronic Discharge from the Nostril removed by Extraction of a Carious Tooth. By Alfred Fleischmann, Esq., M.R.C.S., L.S.A., L.M., *Associate of King's College, Wrexham.*—Miss Rose S., a little girl, aged 5 years, had been troubled for about three months with a constant, though not profuse, discharge of slightly purulent mucus from the right nostril; it appeared to be the sequel of a cold. The mucous membrane, so far as it could be examined, was healthy, and there were no indications of any morbid growth. She was ordered a strong injection of gallic acid, and took concurrently small doses of the sesquichloride of iron. The only advantage she derived was, that the discharge lost its purulent character; in amount it remained the same, though the treatment was long persevered in, and other local astringents tried. I suspected that there must be some undiscovered local irritation. Not being able, on careful examination, to find any thing wrong in the nasal passages, I looked to the condition of the teeth; and, finding the right upper canine carious, removed it. The discharge was much lessened on the next day; and in the course of a day or two, disappeared altogether.

This short account may, perchance, afford a useful hint to some one; at any rate, it is a good illustration of reflected irritation, and teaches us that oftentimes the *fons et origo mali* is not just where we might expect to find it.—*British Medical Journal, April* 9, 1859.

MESSRS. EDITORS:

A very interesting question in regard to the laws determining the normal standard of animal heat and its variations, has been the subject of discussion in the "St. Louis Medical Society" during a few weeks past. I propose giving a brief summary of the views advanced in the discussion, with some observations of my own on the laws regulating the temperature of the human body, which I trust may not be without interest to your readers.

The question referred to is whether animal heat can ever fall below the surrounding medium, it being at the normal standard of the human body, say 98° to 100° Fahr.; and if it may, what are the causes of this variation?

This question arose out of another during a discussion on Asiatic Cholera, whether the cold sweat in this disease could be the result of condensation of the moisture of the surrounding atmosphere? The latter question was made the subject of ridicule at first, on the assumption that the former was a philosophical impossibility, and therefore an absurdity, since the reduction of temperature was dependent on evaporation, antagonistic process of condensation. It was then contended that if it was true that condensation was not the cause, then it was the result of exudation from the venous system, it being congested in this disease in consequence of feebleness of the heart's action. This position, also, was contested on the denial that the venous system could be conjested in cholera. Thus discussions arose on the three questions above stated, which are yet undetermined, and to the first of which I design directing attention.

The fact that the temperature may fall below the surrounding medium, after some discussion, was generally conceded; but others contended that, although it might be possible, it was very doubtful whether it ever did occur. The argument was, that the temperature being maintained at a *certain definite* standard according to fixed laws, by means of all the heat producing processes, it was unreasonable to suppose that there could be any variation at least *below* the normal temperature. Some contended that the processes of radiation and evaporation were sufficient to reduce the temperature, others argued that by the laws above referred to there must be constantly going on a

restoration of this disequilibrium, which was continually occurring in the decay and nutrition of the system, and by combustion in which heat was evolved, the material for the restoration commensurate with the loss was produced. For instance, evaporation if the atmosphere is dry and the temperature is high, goes on rapidly and the skin eliminates carbonic acid, hydrogen, etc., causing a disequilibrium, but the circulation and respiration being proportionally increased, and oxydation augmented to restore the equilibrium the temperature remains at the normal condition, the temperature in the combustion for the supply of new material being the equivalent of the loss by evaporation.

The argument is based, I presume, on the doctrine advanced by Prof. Waters, of this city, in his "Theory of Inflammation," "that Form and Motion are the conditions of all physical phenomena," to-wit, "that decay in an organism, occasioned by heat, air, and moisture, is a condition of life, being an antecedent *motor*, with which *vital motion* is reciprocal."

Dr. Williams appears to hold the same doctrine in the other extreme, namely, that there can be no variation *above* the normal standard, or *excess* of oxydation. In his "Principles of Pathology," when referring to oxydation as a source of animal heat, he says: "It is doubtful whether this change is ever carried on in *excess;* for by an admirable adaptation the activity of the respiration is proportioned to the rapidity of the circulation, and the corresponding need of change in the blood." "In fevers, the frequency of the pulse and respiration is increased; but the muscular strength being much impaired, it is doubtful whether the rapidity of the circulation or the real amount of the respiratory changes is generally augmented in proportion."

The law of adaptation or "adjustment" of the various processes necessary to maintain the animal heat at a certain standard in physiological conditions, I consider the very law that determines the variations from that point which takes place in pathological conditions.

Physiologists generally, if not universally, agree that heat is the result of oxydation, and that in plants and cold blooded animals a normal temperature is the result of a normal oxydation, an elevated temperature of over oxydation, and a low

temperature of diminished oxydation. Dr. Williams admits that the temperature would be diminished or increased in pathological conditions respectively as respiration and the circulation are diminished or increased; but in consequence of muscular impairment, the respiratory changes being incomplete, there can not be over oxydation. Now, if in consequence of this law oxydation can not occur in excess, neither can it take place in a diminished degree, for if that were not so in the hot stage of fever, the temperature would be the same as in the cold stage of cholera, which is absurd. In the normal action of the organism there certainly is never excess of oxydation; but in diseased conditions where the respiratory changes and the circulation are greatly increased there must be excessive combustion and over oxydation. This is the case in tetanus, where, the respiration and circulation being rapid, and the muscular exercise very great, the temperature rises to 110°, whilst in paralysis, for instance, of one arm, the surface heat has been found to be 70°, when that of the other arm was 92°. Here there was no muscular exercise at all.

In fevers the temperature rises to 105°, although the surrounding medium is far below the normal standard. Here respiration is more frequent, the circulation more rapid, the chemical changes greater, and oxydation excessive, even to the impairment of the muscular tissue, and probably in typhoid fever to the partial disintegration of the blood corpuscles.

In asthma where there is insufficient aeration of the blood in consequence of obstruction of the passage of air to the lungs, the temperature sinks to 82°. Here is deficient oxydation *for want* of oxygen, as also in cholera where the cells are probably diseased and are incapable of conveying oxygen to the various parts of the body. The carbon accumulates disproportionately in the veins, and the temperature is often reduced to 75° from diminished oxydation. Also in cyanosis the temperature is 77°, resulting from deficient aeration of the blood, in consequence of malformation of the heart.

Over oxydation may also be produced by the introduction of substances, rich in carbon and hydrogen, for which oxygen has strong affinity—oxydation will go on more rapidly, the respiration and the circulation will be increased, producing for a time an abnormal combustion, the result of which must be too great

elevation of temperature. If the bulb of the thermometer be placed under the tongue the temperature will be seen to rise to and remain at a point above the normal standard until exhaustion supervenes from the large amount of carbonic acid produced during the combustion, when the temperature will be observed to fall rapidly below the normal standard. The first effect was exhilaration of all the heat producing processes and an elevated temperature; the last was depression and a low temperature. Now if these variations may occur for a time under the influence of a temporary cause in a healthy person, may they not in disease be continuous where the cause is of a like kind but more permanent?

The law of adaptation or adjustment may, and does, in most instances, regulate the temperature as it does the process of condensation by cold, where the surface of the water, becoming cold, its density is increased, and it sinks. Thus an interchange occurs, until the whole body of water reaches a temperature of 32° Fahr., when the interchange ceases and the surface only freezes, the body of water remaining at a certain definite temperature several degrees below that of the surface prevents destructive consequences. So in man the same law determines the limitations of the variations from the normal point.

If this be true, it would appear evident at once that evaporation and chemical action are insufficient of themselves to account for or produce these changes of temperature; evaporation being influenced by the dryness and elevation of the surrounding atmosphere, varies considerably, while the temperature of the body remains the same, showing that it is insufficient to produce the change. Chemical action, also, is modified by the amount of oxygen and the capability of the system for aeration, upon which the blood is dependent for its continued supply of oxygen. Upon the other hand, the aeration of the blood is proportioned to the respiration, and this is controlled by the chemical action, which is again modified by the temperature, and may, indeed, be set entirely at rest, if the temperature be extremely low. Thus a reflex action of evaporation and chemical change against a reduced temperature, each depressing the other, may overcome the law of adjustment, so that death may ensue, as in starvation, if food be administered

when the animal heat is reduced to an extreme degree. The equilibrium can not be restored unless artificial warmth be also applied, and the person dies from cold. Thus, in regard to nutrition and respiration, so long as there is a proper supply of respiratory and nutritious aliment, and a healthy action of all the organism, by the law of chemical elective affinity, each organ assimilates from the blood in kind and quantity such particles as are necessary to its constitution and function, and parts with such as have served their purpose in the economy, and by this process of combustion in forming new material, heat is evolved, and the respiratory changes go on normally. Heat evolved in these processes remains at the normal standard while the system is healthy; but if the chemical action by which these changes are produced is arrested by disease, the hydrogen, carbon, phosphorous, etc., will not be burned, and a diminution of temperature must result. From these and other considerations we are compelled to admit that, although it may be impossible to know how the law of adaptation or adjustment determines vital phenomena in all instances; yet we can observe enough to point out the laws by which we may account for the definite standard and the variation of the temperature, while the surrounding medium may vary from 60° below to 130° above zero. STRAIGHT.

Pharmaceutical Department.

By T. E. JENKINS, Pharmaceutist.

FRAUDS IN FLOUR.

It is said that extensive frauds have lately been detected in flour, the cheat consisting in mixing a certain amount of cream of tartar and bicarbonate of soda, or like substances, with bad or inferior flour, for the purpose of forcing it to "raise," as all good flour does, or should do, without such assistance, when properly managed. This adulteration may be detected by a variety of means, among which the following is perhaps one of the simplest:

Sprinkle a little of the flour into distilled water, and if effervescence take place, a "quick yeast" may be suspected. The liquid, after filtration from the soluble matters, will give a white precipitate on the addition of a few drops of solution of chloride of calcium, provided a tartrate or citrate be present. The flour, after incineration, will give an ash *highly* charged with *alkaline carbonates*, if any of the ordinary "yeast powder" be present. Should the yeast powder contain an acid sulphate, as it often does, the filtrate from the flour will give a white precipitate with acetate of lead, which will only partially dissolve in nitric acid.

ADULTERATION OF "LAC SULPHUR."

Precipitate sulphur of commerce is most extensively adulterated with sulphate of lime. Mr. Schweitzer (Br. Annals of Med., vol. 1, p. 618) analyzed a sample, and found its composition to be as follows:

Sulphate of Lime (cryst.) - - -	63.1
Sulphur, - - - - - -	36.9
	100.0

This sample was taken from the stock of a London druggist.

The following analysis is that of a specimen offered for sale by an American druggist:

Sulphate of Lime (cryst.) - - -	60.4
Sulphur, - - - - - -	39.6
	100.0

This adulterated variety is paler than the pure preparation; and by reflected artificial light, it has a glistening or satiny appearance, owing to the presence of the crystals of sulphate of lime. When submitted to microscopic examination, it shows but a small number of the small opaque granules of precipitated sulphur, but presents a great quantity of diminutive transparent and very delicate crystals of sulphate of lime, which, when once seen, will not afterwards be mistaken.

PROCEEDINGS OF THE COLLEGE OF PHYSICIANS AND SURGEONS, OF LOUISVILLE.

Reported by S. M. BEMISS, M.D., Secretary.

April 26, 1859.

Dr. E. T. Polk proposed for membership.

Dr. D. W. Yandell, on behalf of the Committee appointed to present a schedule of ordinances for the better government of the Louisville Marine Hospital, made the following report:

TO THE PRESIDENT OF THE COLLEGE OF PHYSICIANS AND SURGEONS:

The Committee appointed by the College of Physicians and Surgeons, for the purpose of preparing an ordinance for the government of the Marine Hospital, in Louisville, beg leave to offer the following as the result of their labors:

An Ordinance as to the Trustees of the Louisville Marine Hospital.

In May of each year, the Council shall elect three Trustees of the Louisville Marine Hospital, two to be Councilmen, and one Alderman, for one year, who shall have the supervision and control of the Hospital, under such rules as may be prescribed by the Council. They shall visit the Hospital at least once in each month, and at the first regular meeting of the Council in each month, shall report in writing to each Board, the general condition and management of said Hospital, and any failure or delinquency of an officer or attendant there, which may be brought to their notice. At the first meeting of the Council after the 10th of March, in each year, the Trustees shall present to the Council a detailed report for the year, of all Hospital expenditures, its patients, received, discharged, or deceased therein, with all material matters touching its condition and management; and also, a detailed estimate of its receipts from all sources, except the city treasury, and all of its expenditures for the succeeding fiscal year.

The Trustees, or any one of them, may grant permits to enter the wards of the Hospital, to any marine who has paid Hospital dues, or to any person who may have been for six months next before a resident of Louisville, or in any case of urgent sickness, or painful and distressing accident.

The Trustees may, at any time, require of the superintendent, a list of persons employed, and their salaries, and may in case of vacancy appoint physicians, surgeons, their assistants, and resident graduates to serve for the unexpired term. They shall also, in connection with the Hospital physicians and surgeons, make out early in May of each year, and cause to be furnished, such a diet list for the patients in the Hospital, as shall be agreed upon by the Trustees and Medical and Surgical staff of the institution.

An Ordinance as to the Superintendent of the Hospital.

The Superintendent of the Hospital shall be elected by the Council in May each year. He shall reside in the Hospital, and direct and superintend the buildings and grounds, furniture and property, and under direction of the Trustees, attend to the purchase of fuel, food, and medicine, and shall keep an account of the expenditures and contracts for the same. But he shall contract no debt for the city on account of the Hospital, except for the regular supplies, unless it be done under the written order of the Trustees, with which he may make all needful purchases for its regular or extraordinary supply.

Within three days after each month expires, he shall render to the Auditor, a statement for the past month, of all debts contracted by him, whether with or without the order of the Trustees, and of all moneys received and expended by him during that month, on account of the Hospital, which statement shall be laid before the Council at its next meeting.

He shall keep at the Hospital, a book, showing the number and date of admissions, dismissions, and deaths at the Hospital, giving the name, age, and birthplace, and nature of disease, and disability of each person, distinguishing between marines and citizens.

He shall not practice medicine or surgery, either in or out of the Hospital, upon either private patients or paupers, while he occupies the place of Superintedent. He shall not, except in cases of insubordination, or flagrant violation of the rules of the institution, by patients, grant discharges without the order or consent of the attending physician or surgeon; nor shall he transfer patients from either the medi-

cal to the surgical, or from the surgical to the medical ward, or from either of these wards to a private room, without the order or consent of the medical officer in attendance.

An Ordinance to regulate Clinical Lectures, and the appointment of Attending Physicians and Surgeons in the Hospital.

Clinical lectures may be delivered in the building for that purpose, adjoining the Hospital, upon proper patients therein, by a Physician and a Surgeon appointed by the Trustees respectively, of the Louisville University, and of the Kentucky School of Medicine, on the condition that those Institutions make an attendance on a course of clinical lectures, a prerequisite of graduation. The Physician shall be appointed by one, and the Surgeon by the other of said schools, in turns, and said Physician and Surgeon, with such other as may be appointed by each school, in conjunction with them respectively, shall be the attending Physicians and Surgeons of the Hospital, during the months of October, November, December, January and February. For the remainder of the year, and also, to supply any failure of the above arrangement, three Physicians and three Surgeons, and two consulting Physicians, and two consulting Surgeons, shall in May every year, be elected by the Council, as attending and consulting Physicians and Surgeons of the Hospital, and they shall, with the clinical teachers appointed by the schools, constitute the faculty of the Hospital.

An Ordinance to prescribe the duties of Attending Physicians and Surgeons of the Hospital.

The attending Physicians and Surgeons of the Hospital, or one of each, shall visit the Hospital at least once in every twenty-four hours, faithfully attend and prescribe for the sick, direct the management of the patients, grant discharges, and at certain hours and days, by them designated, prescribe for indigent sick not admitted to the Hospital who may apply. The Physicians and Surgeons shall also see that the apothecary shop at the Hospital is in proper order, and well supplied with good medicines; note all neglects and improprieties, whether in the manner of compounding the medicines, or in those who furnish them, and report the same to the Trustees at the end of each month or oftener. They shall also direct the resident graduates to report to the Superintendent, such persons as are in a condition to leave the Hospital; and patients who shall leave the Hospital without such discharge, shall not be allowed the privilege of re-admission to any part of the building. They shall require that all prescriptions, or orders for medicines, in the public or private wards, or for dispensary patients, shall be recorded in ink, in a book kept by the resident graduates for that purpose, and they shall affix their signature to every page in said book, as an evidence that said prescriptions or orders are correct. They shall attend all autopsies. They shall also be empowered to order, at any time, such extra medicines, not found in the house, as may be required. They shall grant admission to the Hospital to such persons as may have been for six months next before, residents of Louisville, or to any person who is the subject of an urgent sickness, or painful and dangerous accident. They shall, under ordinary circumstances, adhere to the diet list directed by the Trustees of the Hospital, but shall have the power to order such extra articles of food and drink as may in their judgment, be deemed essential to the welfare or comfort of the patients under their charge. Each attending Physician and Surgeon, shall also report in writing to the Mayor and Council, at the end of his term, the general condition of the Hospital, with such remarks as he may think useful, and shall also cause to be prepared from the books of the Hospital, on the first day of March in each year, by the resident graduates a table showing the number of persons admitted, died, or discharged during the year, with the birth place, and disease, by classes, and report said table to the Trustees by the 10th of March, so that it may be embraced in the annual published account of the state of the Hospital.

An Ordinance as to Resident Graduates in the Hospital.

Two graduates of some Medical School, chartered by this State, shall be elected by the Hospital Faculty in May, every year, as resident graduates at the Hospital, to continue in office one year, to be boarded and lodged at the Hospital, and their washing done, but to receive no other compensation. When there are one or more candidates for the place, from the two Medical Schools in Louisville, one graduate shall be selected from each school. They shall reside in the Hospital, visit the wards once every morning and evening, and oftener if required, put up neatly and carefully, and in good time, medicines prescribed for the sick, and see that they are duly administered. They shall take down in ink, in a book for the purpose, all prescriptions and medicines ordered in either the public or private wards, or among

the out-patients, and the same shall be certified to by the physician or surgeon in attendance. They shall also be required to prepare the commoner tinctures, ointments, powders, etc., in ordinary use, and shall perform such duties as may be imposed on them by ordinance or resolution of the General Council, as may now be in existence or hereafter be passed; and on failure or refusal to do so, the offices may be declared vacated by the General Council, and the vacancy filled as may be directed by said Council.

They shall keep an accurate daily record of all cases, both medical and surgical, admitted into the Hospital, with the treatment adopted, and the result of the same. They shall perform all autopsies under the direction of the medical officer in attendance; shall preserve such parts as may be deemed of sufficient interest, and arrange and label, and keep the same for the purpose of creating a museum to be styled the *Pathological Museum of the Louisville Marine Hospital*, in which all morbid specimens obtained in the institution shall be placed and preserved. They shall also record such description of the post mortem appearances, as may be directed by the medical officer on duty. On the first of May, of each year, they shall prepare and append to the Hospital Case or Record Book, an accurate and copious index, containing both the names of the patients and of their diseases. They shall both at no time be absent from the Hospital, nor shall either absent himself for longer than two hours, without the consent of the attending physician or surgeon, or superintendent, and when one graduate is absent at the hour of the daily visit of the medical gentlemen in attendance, the other shall fill his place and discharge all his duties. They shall not attend on their own account, upon any private patients, nor receive pay or other recompense from any inmate of the Hospital, nor practice medicine or surgery out of the building, whilst they remain resident graduates of the institution. The Trustees shall fill any vacancy that may occur during the year.

All of which is respectfully submitted.

R. J. BRECKINRIDGE,
J. METCALFE,
D. W. YANDELL.

After being amended, the report was adopted, and Drs. Rogers, Powell and Hardin, were appointed a committe to present it to the City Council, with a recommendation for its adoption as city ordinances.

Dr. Powell read the following notes of a case of Puerperal Mania, which had occurred under his care.

Case.—Mrs. R. D. A., æt. 34; married 13 years without issue, of delicate and highly nervous constitution, and long the subject of dysmenorrhœa, hysteria and dyspepsia, and inflammatory lesions of the uterus, with almost constant leucorrhœ, having had her health greatly improved within the last twelve months, and chiefly through the agency of the nitrate of silver to the os uteri, and the internal use of the iodide and bromide of potash, and the iron by hydrogen, most unexpectedly proved pregnant, passed through her pregnancy as comfortably as most women, with the exception of a mental despondency, which nothing could alleviate, and at the full term fell into labor of a most tedious and lingering character which endured through four days, viz., 7th, 8th, 9th, and 10th of January. As the presentation was natural, being that of the vertex in the second position of Baudeloque, and the natural powers after full trial being inadequate to the delivery, as soon as the head fairly entered the pelvic excavation, I applied the forceps, when, being worn out with the four days and nights of constant attendance, I consigned the work of extraction to my able assistant, Professor Miller, whose strenuous and somewhat protracted efforts happily resulted in the birth of a living male child of extraordinary size. The patient being profoundly under the influence of chloroform was totally unconscious of the whole proceeding.

I found the placenta partially adherent. I readily detached and carefully extracted it. The uterus contracted well and but a moderate amount of blood was lost. The patient was greatly exhausted, did not recover entire consciousness for two or three days, but continued to convalesce steadily, though slowly, up to the 30th, i. e., 19 days after the delivery, when suddenly and unexpectedly she exhibited unequivocal symptoms of puerperal mania. She insisted upon getting out of bed, was impatient of restraint, irascible, agitated, and alarmed, and her mind disturbed by various hallucinations. As her face was pale, the skin cool, and the pulse not excited, I decided at once that there was no demand nor warrant for any kind of depletion; and as the tongue was clean and the breath untainted, it seemed equally

clear that the case did not belong to that class in which purgatives are especially indicated and so eminently useful.

But looking to her delicate and highly nervous constitution, the severe shock she had sustained, and the exhaustion which had followed upon her labor, I concluded that narcotics and sedatives were the only safe and suitable remedies.

Accordingly I ordered 50 drops of laudanum to be repeated every hour until she was tranquilized and inclined to sleep.

31st. Laudanum had been given to the extent of 200 drops, when imperfect sleep supervened. I find her this morning more manageable, but her mental perceptions and associations as much perverted as before, pulse and skin unchanged, countenance expressive of deep dejection; ordered nourishment and laudanum through the day, the latter to be increased at night.

Feb. 1st. Sleep during the past night unquiet and interrupted; no amendment in her condition; even more distressing from the occasional occurrence of painful spasmodic contractions of the abdominal muscles, tremor of the limbs and rigidity of the lower jaw, with sense of stricture in the throat and epigastrium, presenting the appearance of aggravated hysteria.

These inordinate movements were quelled for the time by the free inspiration of chloroform, the bladder emptied by the catheter, no urine having been discharged for twenty-four hours, and calomel and an enema directed to be given, as the bowels had not been cleared for several days.

Evening. Bowels moderately evacuated, the mind not more lucid than before, no sleep during the day. Ordered one grain morphine per hour until sleep should be induced.

2d. Had slept imperfectly, mind lucid at intervals, but excessively despondent and distressed. R. morphine i gr. q. h. through the day, and at night 1½ gr. every two hours until she sleeps.

3d. Sleep imperfect and broken, lucid intervals more frequent and of longer duration, but the muscular spasms recurring often and in a more distressing degree. These were held in check during the day by the frequent administration of chloroform. Nourishment was furnished in the shape of chocolate and oyster soup, and morphine ordered for the night.

4th. Passed a most unquiet night. Delirium not constant, but the muscular spasms most distressing. The stomach much disordered by the morphine, vomiting urgent, nausea almost constant, and thirst frequent. R. chloroform to the relief of the spasms, crushed ice to alleviate the thirst and nausea.

9 o'clock, P. M. Patient still suffering greatly with nausea and frequent spasms. R. 5 drops of dilute hydrocyanic acid, to be repeated every 4 hours until perfect quietude and a disposition to sleep ensue.

5th. The patient slept uninterruptedly through the whole night, the medicine of course was not repeated, at 9 o'clock, A. M., the muscles of the abdomen and superior extremities, were again thrown into violent contractions, and the delirium recurring, 5 drops of hydrocyanic acid were administered immediately. In thirty minutes she fell into a quiet slumber, and on my return at 4 P. M. I found her still sleeping.

At 5 P. M. took 5 drops of the acid. She was then tranquil and rational.

At 8 A. M. a paroxysm of spasm recurred with great violence, frequent and strong jerking of the abdominal muscles, pulse, skin, and tongue, present no material deviation from their normal conditions. Some of the symptoms strongly indicate that they have their origin in morbid sensibility of the uterus and some of its appendages, this suspicion greatly strengthened by recollection of the fact that for a long period before her pregnancy she was the subject of chronic ovaritis. Put her under the full influence of chloroform, and ordered 5 drops of the acid to be given at 10 o'clock, and to be repeated if necessary every 4 hours.

6th. Delirious and excited all night, the besetting and persistent hallucination being that she was in labor, and consequently making the most violent bearing down efforts, which are not suspended for a moment without the restraining influence of chloroform, to which effect it requires to be given in immense quantities. R. hydrocyanic acid 5 drops every three hours, and 1½ gr. morphine at like intervals, irritate the upper and lower part of the spine with Granville's lotion, and administer gin toddy.

10 P. M. Stomach much affected with nausea, general disquietude, occasional spasms. Ordered narcotics to be discontinued in order to allow the system to emerge from the influence to note the effect on the mind.

7 to 9 A. M. Patient slept but little, the intellect, however, much less disturbed, disposition to spasm preceded by a painful sense of excitement in the clitoris, and alleviated by strong pressure with the hand against the pubis.

Applied to the upper part of the vulva a soft linen cloth smeared with a solu-

tion in glycerine of ext. stramonium, and ordered to be given every 4 hours 5 gr. iodide potassa, with ½ gr. Indian hemp.

10 P. M. Quiet through the day, but at this time suffered a more violent and prolonged paroxysm than at any previous period, discontinue both prescriptions, and give 100 drops nor. mumis elixir of opium, and report in 4 hours.

8th. Passed a sleepless and restless night, R. of camphor and ammonia and 5 gr. every three hours, with a view to allay excessive irritability and sustain strength, with such nourishment as she can be prevailed upon to take. Either from paralysis of the bladder, induced by the large doses of opium, or from a perverted notion of the patient that she cannot discharge her urine, that has been regularly drawn by the catheter. The bowels seem to be equally insensible and require to be moved by enemeta.

10 P. M. Passed a tranquil day, with the exception of occasional nausea, mind undisturbed and rational. At noon I examined the genitals, and found, as I had suspected, decided vulvitis, the mucus membrane turgid, dry, and red. There is reason to believe that much of the distressing tenesmus and spasmodic straining which distinguish the case is attributable to this cause. Accordingly I applied to the inflamed surface a strong solution of nitrate of silver, (30 gr. to the ounce), the usual night paroxysm has been thus far escaped. How far this may be ascribed to the influence of the nitrate of silver in modifying the sensibility of the inflamed vulva can not yet be determined. R. the usual dose of camphor and ammonia, and 100 drops of elixir of opium.

9th. Passed a sleepless night, but calm and composed this morning, with an intellect clearer and more collected than at any previous period since her illness, distressing irritability of the vulva and consequent spasms thus far entirely suspended. R. ammonia and camphor mixture, and nourishment through the day.

10 P. M. Rational, quiet, and comfortable, up to this hour, when she began to yawn, with slight shiverings, which soon amounted to spasmodic twitchings of the abdominal muscles, the first paroxysm of the kind for 48 hours. R. i gr. morphine to be repeated in 2 hours, and apply sinapisms to the leg and chest.

10th. The spasmodic paroxysm proved of short duration, sleep imperfect, this morning mind natural and calm, and the urine voided spontaneously, tongue clean, skin cool, and the pulse weak. R. sulph. quinine and iron by hydrogen 2 gr. of the former and 1 of the latter every 4 hours with nourishment.

9 o'clock P. M The quinine has been well borne, quite tranquil, 1 dr. of tinct. of valerian to be substituted for the usual night opiate.

11th. Slept but little, several paroxysms of nervous excitement and muscular spasms. This morning stomach frequently nauseated with occasional vomiting of bilious matter, appetite extinct, complexion muddy, but tongue clean. R. solution bicarb of potassa, with hydrocyanic acid to curb the gastric irritability, and give rhubarb and soap in pills to move the bowels.

9 P. M. Bowels well evacuated by the rhubarb, aided by an enema, no disposition to sleep, on the contrary more lively, vigilant, agitated, and incoherent with muscular tremors, much the aspect of delirium tremens. R. sulph. morphine 2 gr. to be repeated every three hours until she sleeps.

12th. Slept but little, talked incessantly, and harassed with many hallucinations, the 4 gr. of morphine taken within the space of 3 hours seeming to exert but little control over the nervous excitement.

This morning, nausea as usual, with sighing respiration, occasional startings, and dull, stupid expression of countenance, with slow and rather feeble pulse. Suspend the morphine and give 2 oz. of porter or Scotch ale, q. h. with nourishment.

9 P. M. Emerging from the condition of narcotism, countenance more natural, pulse regular, mind rational but dejected, nervous restlessness and startings, with feeling of alarm, but no spasms, with sighing, almost sobbing respiration, oppression at the precordia, and flatulent eructations, giving to the case a decided aspect of hysteria. Withheld all the medicine for the night, and give the ale occasionally.

13th. Slept well through the night, intellectual faculties clear and under perfect command, pulse soft and regular, tongue clean, skin cool and unctuous, and stomach quiet. R. ale and nourishment.

3 o'clock, P. M. Convulsive contractions from head to foot, accompanied with screaming, and followed by delirium, imploring in the most piteous manner that she might not be taken to the lunatic asylum. R. camphor and ammonia and 5 gr. q. t. h.

10 P. M. Calm and with a quiet state of the muscles, but the countenance dejected and mind wandering. R. ½ gr. morphine.

14th. Quiet through the night, but utterly sleepless, composed and comfortable this morning, and apparently quite rational, free discharge of urine and a natural

evacuation of the bowels, and the lacteal secretion which has been suppressed during her whole illness, partially aroused. R. ale and nourishment and early in the afternoon ½ grain morphine in anticipation of the evening paroxysm.

10 P. M. Has slept two or three hours during the day, has been throughout the whole day and is now perfecily quiet, rational and comfortable. If not spontaneously inclined to sleep an hour or two, hence R. 50 drops of elixir of opium.

15th. Slept well during the night, mind and body both without morbid excitement. R. occasionally a dose of camphor and ammonia, with ale and nourishment.

10 P. M. Still doing well.

16th. Slept several hours during the past night, and is apparently convalescent. R. ale and nourishment.

10 P. M. Tranquil and comfortable.

17th. Slept moderately well. The mental faculties seem to be restored to their due balance, and the muscular system tranquilized. The patient may be regarded as convalescent.

This patient consumed from the 10th of January to the 6th February 77 oz. chloroform, or near 5 lbs., a striking illustration of the extent to which this powerful sedative may sometimes be employed with safety.

Dr. A. B. Cook read the following notes of a case of wound of thoracic organs—the injured parts had been previously exhibited to members, and were now in the museum of the College:

Injury of the Right Breast—Pneumocele Penetration of the Heart and Diaphragm. *Death. Post Mortem. Reported by* Archie B. Cook, M.D.—On Friday morning 26th March 1859, I was called to see J. S. Phillips, who had been severely stabbed, in a melee, on board the David Tatum. I reached him about 8 o'clock, one half an hour after the reception of the injury, and found Dr. F. McCabe engaged in the case, who kindly solicited my assistance. We had the patient removed temporarily to an inn near by. He was in a state of collapse and almost pulseless from loss of blood. The external wound (inflicted with a large knife) was between three and four inches in length, extending obliquely downwards and forwards, over the right breast, a little external to the nipple, cutting through the integument pectoralis major, fifth rib, and fourth and fifth intercostal spaces. A portion of the middle lobe of the right lung penetrated through the fifth intercostal space. The hemorrhage, chiefly venous, was profuse and poured out in a livid stream, mingled with air, at each respiration. Stimulants were freely given by the mouth. The protruding lung was returned; the edges of the wound drawn together with three sutures and adhesive straps, over this a cotton compress retained by several broad adhesive straps extending from the angle of the ribs to the left border of the sternum—the object being to close the wound and at the same time fix the right side of the chest. He was then removed to the Louisville Marine Hospital. We ordered heat to the extremities, cloths wrung out in cold water, over the right chest, and stimulants "pro re nata." At 4 o'clock, P. M., reaction was established; some fever. We ordered a pill of Hyd. Sub. Mur. gr. i, Pulv. Opii. gr. jss, Ip. Pulv. gr. ¼, every 4 hours, and lemonade as a beverage.

Saturday morning, he had pleuritic inflammation of the right side. The heart sounds could be heard, but the organ appeared to move in fluid—a splashing sound as Dr. McCabe very appropriately termed it; tenderness over the liver; pulse 100. At 4 o'clock, P. M., pulse 125, respiration 54 per minute and labored; great thirst; continued the pills, and ordered Liq. Ammon. Acetat. 4oz., Spts Nitre ½oz, Tr. Veratrum Viride gtt. Lx.—One tablespoonful every 4 hours until the pulse was sensibly reduced; four leeches over the inferior margin of the liver, followed by hot fomentations; to have beef tea and gruel.

Sunday morning, he was more comfortable; pulse 105, respiration 36; continued the treatment, and ordered a blister of Cantharidal Collodion over the right hypochondrium. In consequence of nausea and retching, the veratrum mixture was suspended at 10 o'clock. In the evening the pulse was 108, respiration 42; frequent micturition accompanied with acute pain; continued the pills; the veratrum mixture every three hours in diminished doses, and ordered an opiate enema.

Monday morning, pulse 108, respiration 32; continued treatment. At evening pulse 105, respiration 34; had nausea of stomach during the day: ordered the verat. mixt. in dessertspoonful doses after cessation of nausea, and an enema of molasses and gruel, to be followed, after an evacuation, with an opiate enema.

Tuesday morning, 9 o'clock P. M., pulse 125 and feeble, respiration 36; countenance anxious. Redressed the wound; a quantity of bloody serum flowed from the

opening; ordered Ammon. Carb. with Syrup Senega, and a liberal allowance of wine. He expired at 2 o'clock 20 minutes P. M.

Post Mortem 19 hours after Death, by Drs. F. McCabe and A. B. Cook.—External wound through the skin and pectoralis major obliquely downwards and forwards, over the right breast, a little external to the nipple, 3½ inches in length. The knife cut through the inferior border of the fourth rib, the osseous portion of the fifth rib about one-half inch from its junction with the cartilage, and two-thirds the cartilage of the sixth rib, making an open wound of more than two inches in length into the thoracic cavity. The knife cut through the inferior angle of the middle lobe of the right lung, the divided portion hanging by a peduncle to the body of the lobe. One incision one inch in length passed through the diaphragm over the convex surface of the right lobe of the liver, dividing the peritoneal and fibrous coats of the organ without penetrating the structure; another posterior to this, more than one inch in length, divided the muscular fibres of the diaphragm without injury to the peritoneal covering. Another incision of more than one inch in length, was found through the pericardium, the knife penetrating the right auricle of the heart, the opening into the auricle commenced at the terminus of the inferior cava, and passed obliquely downwards in the direction of the right auriculo-ventricular opening; this incision through the wall of the middle auricle, measured three-fourths of an inch. In the right pleuritic cavity there were the evidences of extensive pleuritic inflammation, a deposit of fibrinous lymph over the pleura pulmonalis and costalis, with a considerable quantity of serous exudation. Adhesion had taken place at one point between the superior lobe and thoracic wall. The lung was in a state of congestion without inflammation. There was profuse fibrinous deposit over the inner surface of the pericardium and the heart, with considerable quantity of serous exudation, the opening through the auricle was partially closed, with a fibrinous clot attached to and lying in the cavity of the auricle. The serum in the pleuritic and pericardiac sacs was discolored with blood; there were no coagula. The abdominal organs were all healthy; no sign of any peritoneal inflammation at the point of injury, to the diaphragm.

Dr. Bemiss presented a ruptured vagina, for the observation of members. The rupture occurred during labor, and was followed by the escape of the fœtus into the abdominal cavity. Abdominal section was performed by Dr. J. B. Flint, and the fœtus and placenta removed four hours after the accident. Death resulted on the third day. The notes of the case, account of operation and autopsy, are necessarily postponed to a future number.

Dr. D. W. Yandell said, he wished to inquire whether any Fellow present entertained the opinion that pregnancy could exist in a female who was undergoing treatment for uterine derangement, a part of which treatment had consisted in the introduction of Simpson's sound, to the usual extent. He wished it understood, that he did not desire by advancing this inquiry, to imply a belief in his own mind, in the co-existence of pregnancy with this treatment. Nevertheless, his patient had so strongly asserted and persisted so tenaciously in the assertion that she was pregnant, that he was induced to lay the matter before the College. She had, in addition to her "sensational" symptoms, arrest of menses.

Dr. Hewitt stated, that he doubted the possibility of pregnancy under such circumstances. He had no doubt the arrest of menses was due to the diseased condition which Dr. Yandell had been called to treat.

Dr. Flint called attention to an interesting pathological state of the kidney of a patient for a long period, under his care.

The fons et origo mali was, in his opinion, a malignant affection of the vagina and uterus; these organs had become agglutinated to the bladder, and the mouth of the ureter had become involved in the destructive process, thus rendering the escape of urine into the bladder very difficult, and consequently, the immense expansion of the ureter and capsule of the kidney, both of which had been converted into urinary receptacles. (More extended accounts of the case, and post mortem, with the discussion, are postponed.)

Editorial Department.

The following letter has reached us from our Junior Editor, who to the regret of his many friends, no less than our own, has been compelled, from business engagements, to absent himself at a time when it was his earnest desire to be at home, and to undergo the toils of a long and tedious journey. He will again be at his post by the first of June, unless some unexpected delay occurs. In his absence, however, all letters addressed to him as Dean of the Faculty, or Editor of the News, will be promptly answered by his colleagues:

Indian Camp, Coatzocolcos River, Mexico, April 4, 1859.

Can any items from this wild and isolated spot interest you? I think they can and should do so. First then, a few words in reference to our hostess and her feminine neighbors, the male Indians being out cutting mahogany. Their appearance is prepossessing, their figure beautiful, and freely shown, for they only wear a wrapper termed *enrollado*, around the waist. There is a bland and placid qietude of their feature which almost amounts to coldness. Their gentleness and natural politeness surprised me, for I had anticipated rudeness and vulgarity. Their partial nudity was, to my eye, modesty, when compared with the more refined and civilized style of indicating by studied lines, the existence of certain developments so artistically and voluptuously practiced by many who would recoil from contact with those poor Indian women. Our dinner consisted of tasajo and beans, pozole, tortillas, boiled eggs, wild

honey, and a decoction of leaves of the wild orange tree, and native sugar. These, together with our own camp stores, enabled us to fare most sumptuously. I would especially direct your attention to the pozole and tortillas. The former is made as follows: Corn is boiled for an hour or two in lime water; afterwards it is washed, and the rind entirely removed, it is then placed on a stone and rolled or rather mashed by another, so that a sort of paste or dough is thus formed. It is afterwards dried and then rolled into meal. After a few hours it becomes slightly acid; it is then simply stirred in cold water, and makes a very palatable drink. Some add sugar or honey, as the taste may suggest. I think, however, that without sweetening, it would prove to be a grateful beverage in cases of fever or others requiring simple and yet nutritious diluents.

Tortillas are prepared in precisely the same manner so far as the corn and rolling are concerned; but so soon as it is thus rolled, it is formed into thin cakes and baked over the fire, afterwards these are nicely toasted, so that they taste very much like parched corn. I am certain that in cases of irritability of the stomach, they would be relished and retained, when almost every thing else would be ejected All practitioners know how difficult it is to meet the varying tastes and whims of convalescents, and every useful addition which can be made to our too limited resources for this purpose, should be treasured. The "orange tea" is delicious; it is much used by the Indians, and highly valued by them as a medicinal agent, it is an excellent sudorific.

Their sugar is made from the cane, but you could not distinguish it from maple sugar, either by its taste or appearance. At night we had "lemon tea," a decoction of a sort of grass called zacate de lemon; it makes a pleasant drink, but is not considered so medicinal as the orange.

Tasajo is simply jerked beef. You are aware that in some parts of Mexico, it is said, that meat does not undergo putrefaction, it simply dries. This is particularly true of Guchitan, and is by many attributed to the large "salt mines" in that region, which render even the earth itself and the vegetation saline. In other and most places this is not the case, but in all, meats can be preserved much longer in the air than they can in the United States.

Phthisis is unknown among the natives, as far as I can d s-cover, and I know that my inquiries have been made of those who would certainly know of its existence if it prevailed. Many have come here with manifest symptoms of the disease and have become healthy — so says rumor. Is there any connection between these facts and that previously stated?

I have observed a great many deeply marked by small pox, and several have been rendered blind by this scourge. I have also noticed numerous cases of leprous diseases. A Jew would suggest, that the pork which they eat would account for this, but indeed if you were to see the hogs you would wonder what there was on them which could be eaten at all. At different camps I have seen cases of fever and chicken pox, but generally speaking, the natives are robust, well formed, and fine looking. There are, however, many tribes on the Isthmus, which you may know from the fact that there are sixty-four different dialects spoken.

Many of the natives are owned by those to whom they are indebted. Thus if one owes you, and if he neglects to pay you, he becomes yours until he does so, the wages being regulated by custom and law. You may dispose of him by disposing of your claim against him. If, however, you desire to retain him you can do so, as nearly all do, by managing to keep him always involved beyond his power of extrication.

Their spirituous drinks are principally chinquerita, a sort of rum made from sugar and anisda or *anisette*. They work well. Our canoe is cut out of solid mahogany, and is capable of conveying 20 or 30 people, but you need not hence imagine that any style pertains to it. A scorching sun above, and shallow water below, render our progress slow and melting.

The song and plumage of the birds are exquisitely beautiful and pleasing. I have been amusing myself by dissecting a macaw, and was surprised at the number and development of the muscles of the jaw and larynx, and the great size of the nerves. Monkeys are around us in great numbers, and if I had time, I would make preparations of some of them. I will write again from Tehuantepec. Truly yours, B.

The last meeting of the State Society was more largely attended than those of several preceding years; and though it

fell far short in point of numbers, of the expectations of those members who were earnestly hoping an immediate restoration of its former vigor, it still gave gratifying proof of renewed vitality. Able reports were offered from several of the committees, and the retiring President delivered an address which will long be remembered by those who had the privilege of hearing it, as a production no less classic and beautiful in oratory than matured and sound in tenets.

The same gentleman, before the adjournment of the Society, offered the following resolution which was unanimously adopted, and the mover, Dr. J. B. Flint, appointed chairman of the committee, with power to select his associates:

Resolved, That a committee be appointed to wait upon the American Medical Association, so soon as it shall have opened its session in Louisville, and in behalf of this Society bid it welcome to the Medical jurisdiction of Kentucky, assure it of the cordial interest of the profession of the State in the objects and purposes of its institution, and of the readiness of this Society to co-operate in all its endeavors to promote the honor and usefulness of our common calling.

We solicit the attention of our readers to the following letter from a highly esteemed correspondent—a physician whose labors in the science of public hygiene, have already won for him an enviable reputation. The letter contains suggestions that we have already made to various correspondents in private letters, and we are glad in having this opportunity to renew them through our Journal, and offer its columns to all reliable observations of epidemics. For the present, we are obliged to request those who may favor us with observations upon these subjects, to condense them as much as possible. If our success is commensurate with present prospects, we expect, at the end of the year, to enlarge our paper, and then we will be able to admit more elaborate productions.

New England, April, 1859.

Messrs. Editors:

No Medical Journal in this country, within our knowledge, gives special attention to the subject of Public Hygiene, or to the history and progress of epidemics. A few isolated paragraphs, generally found floating in the secular papers, and an

occasional letter from a correspondent, giving the most meagre information, of some particular locality, are all that we meet with upon this subject, in medical journals. We have never seen the least attempt to trace a full history of any epidemic, or to show the nature of epidemic or other diseases which are prevailing at any one time, over any extended section of country. When any account of an epidemic is attempted, it generally consists of estimates and random statements, and not of positive statistical information. This state of things, probably, arises from the fact that very few persons in this country have, heretofore, been interested in this kind of inquiry, and the importance of the subject has not been understood. Within a few years past, a remarkable impulse has been given to the investigations upon this subject, both in the minds of the public, and the medical profession. The important truth, which has long been known as a proverb, that "*prevention is better than cure*," is beginning to be appreciated in its practical application to the numerous diseases with which our race is afflicted.

We believe this to be a most favorable omen, not only for the public good, but also for the interests, and advancement of the medical profession. But how can we prevent disease unless we know the causes? And how can we know the causes unless we have observers? And of what use to have observers unless their observations are made known? What we want then, is,

First, Attentive, accurate observers, in every section of the country, who will watch the progress, history, and causes of epidemics and other diseases, which prevail in their localities; and

Secondly, We want the results of their observations collected and published so that they can be used by others.

The time will probably come, when the general interest in the subject, will require journals especially devoted to the advancement of sanitary science. At present, we have no means of obtaining this information, so appropriate as the medical journals of the country. No medium of communication so appropriate can be found at present, or in the future, if these journals can devote sufficient attention to the subject. The readers of medical journals are the very persons upon whom we must depend for all valuable information of this kind, and they are the persons who will take the deepest interest in reading such information.

Can you not take the lead in this matter, in Kentucky, by adding a new feature to your already valuable journal? I am confident that the profession in your State would be interested in a brief "Sanitary Review," published monthly, or quarterly, and giving information in relation to diseases which are prevailing in different sections, their severity, their apparent causes, the localities in which they occur, and other items of this description.

You have many physicians in Kentucky, some of whom I am happy to know, who would gladly furnish, and be interested in reading such information. The publication of such information from different localities, would also excite an interest in the same localities, in the success of your journal. I leave the subject for your consideration. S.

Since our last issue, the following publications have been received, most of which will be noticed at length in our next: Corson on the management of the Shoulders, in Examinations of the Chest; a review with wood cuts prepared, but is necessarily laid over. Sixteenth Registration Report of Massachusetts, from Dr. Curtis. Transactions of the Third Session of the Medical Society of the State of California, convened at San Francisco, February, 1858. Observations on Longevity Chaille, B. Dowler. Two cases of Encysted Tumor of the Ovary, successfully treated by excision, and an attempt to justify the operation of ovariotomy under certain circumstances, read before the College of Physicians and Surgeons of Louisville, by Henry Miller, M.D., President of the College. Memorial to the Legislature of Massachusetts, by Edward Jarvis, M.D., upon some points of Hygiene connected with Boston. Constitution and By-Laws of St. Louis Medical Society. An Examination of the question of Anaesthesia, by Hon. Truman Smith.

ADVERTISEMENT.

HISTORY of the AMERICAN MEDICAL ASSOCIATION.

By N. S. DAVIS, M.D., of Chicago. To which is added

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Semi-Monthly Medical News.

VOL. I. LOUISVILLE, KY., MAY 15, 1859. NO. 10.

REPORT OF THE COMMITTEE ON SUITS FOR MAL-PRACTICE.

Submitted at the Fourth Annual Meeting of the Kentucky Medical Society, by C. H. SPILMAN, M.D., *of Harrodsburg, Ky.*

(Continued from page 234.)

It may be objected to this view of the subject, that the argument against the reference of medical conduct to a non-medical tribunal, will apply with equal force to every other profession and branch of business. The groundlessness of this objection will appear, however, by referring to the well known fact, that in every other profession and department of business, science and skill are appreciated and rewarded; but in regard to medicine alone, there exists, in the public mind, no just and rational appreciation.

It is not an easy matter to account for the fact, the existence of which no one will deny, that the non-medical public, however enlightened, and how eager soever in search of knowledge upon every other subject, are profoundly ignorant upon the subject of medicine, and victims to the boldest, most unblushing quackery. It is not surprising, therefore, that our judicial records, on this subject, should exhibit one continued series of blunders.

Viewed in whatever aspect, the existing policy of our country in regard to the profession of medicine, is an unmitigated public and professional calamity. The good of society, the honor of the nation, the scientific advancement, and efficient usefulness of the profession, alike demand a change of our laws in conformity with the following provisions adopted by the Medical Congress of Paris: "The responsibility of a medical practitioner in a medical case, can not be estimated by

non-medical persons. In any case, therefore, in which his responsibility is called into question, the penal articles of the code ought only to be applied after a decision has been obtained from a medical jury."

Here we have an example of the fostering care of medical science; a distinct expression of the estimation in which it is held, by one of the most highly cultivated nations of Europe; certainly first, in point of medical enlightenment. A profession to which society owes its physical and moral improvement, is so largely indebted for its civilization, elevation, and refinement, is certainly an object worthy the fostering care and protection of government.

It has been shrewdly remarked, that nothing is more contemptible than a cowardly soldier, or an ignorant medical man. The first is contemptible because he deserts his country in the hour of danger; the second, because he compromises the life and welfare of his fellow creatures. Of our exemption from the former odium, our invariable success upon the battle field affords the most triumphant vindication. For our security against the latter, government is certainly under the strongest obligation to provide. It could not escape the acutely discriminating mind of the French, that the reference of all matters of controversy, touching professional conduct, to a professional jury, must operate as a regulator, correct professional abuses, and elevate the standard of professional excellence. Conformably to these views, they adopted the policy, therefore, of discharging their obligations to society, by furnishing through this medium, highly qualified and competent medical advisers.

The legitimate working of such a policy can not be mistaken. The establishment of such a test, the prospect of such an ordeal, the erection of such a professional touchstone, could not fail to present the strongest incentives to the acquisition of a thorough medical education, an entire command of all its resources, and to exclude such as feel conscious of being found wanting, when weighed in the professional balances. Permit me to indulge a hope, that the time is not far distant when a similar policy will be adopted towards the American medical profession; and that, while the claims of society are fully recognized by its members, and meet a cheerful response, it will not

be forgotten, that the claim is reciprocal, that there is something due from government to the profession, that it will throw around it its protecting arms, extend to it its fostering care, and co-operate with it in endeavoring to elevate the standard of its excellence, by extending the boundaries of its knowledge, and multiplying the means of its usefulness.

The manifest injustice resulting, and still likely to result from the present policy, is so glaring, that it threatens to drive all competent, well qualified, and honorable men, from the ranks of the profession, and leave it in the hands of quacks and ignorant pretenders. The learned and accomplished physician will not consent to subject himself to the hazard of being brought to trial upon the merits of his professional conduct before a jury, wholly unacquainted with the matters involved, easily hoodwinked, bamboozled, and misled, by the plausible appeals, the persuasive eloquence, and the *ad captandum* arguments, of the accomplished advocate, who has become so adroit in the art of combating truth with sophistry, as to be able, at pleasure, when the interests of his client demand it, to dumbfound, confuse, dazzle, and bewilder, both judge and jury, make the "worse appear the better reason," and pervert the end of truth and justice. Such a man can hardly be induced to suspend his personal safety and his professional reputation upon the cast of a die. It is a game in which there is rather too much chance, and too little science; too much to lose, and too little to gain; and too sacred interests involved to justify the adventure. You are aware, that in some of the eastern States, where suits have been frequent, such is the dissatisfaction as to the results, and such the utter hopelessness of obtaining a fair and impartial verdict, some of the best physicians have absolutely refused to undertake a case, until they have obtained the most unequivocal assurances, that no suit shall be instituted, in the event they fail to give satisfaction.

So common has it become to call in question the propriety of medical conduct, and so liable is the non-medical man to misunderstand and misjudge such conduct, that *malum judicium* threatens to become quite as disastrous in its consequences, as *mala-praxis*. Upon questions connected with medicine and surgery, involving so much doubt and difficulty, as to embarrass the most learned and experienced members of the profession,

men, profoundly ignorant of the subject, talk most flippantly, and are prepared to sit in judgment, and pass a verdict, with the most perfect self-assurance. At such ridiculous, fantastic tricks, under the solemn sanctions of law and justice, angels may well weep.

Having exposed the absurdity of the existing laws and usages of our country in regard to medical responsibility, and, as I think, successfully vindicated the claims of medicine to a fair trial before a competent tribunal, I propose, in the next place, to institute an inquiry into the character of those whose conduct should be regarded a proper subject of adjudication. My feelings are decidedly against the judicial recognition of the whole tribe of nostrum mongers, justly styled in common parlance, qnacks. They are, or should be, held professionally irresponsible; and whether regard be had to the sacred right of election, or to the public weal, it would seem reasonable to abandon their patients, without the means of redress, to the results of their own choice, particularly when, as a general rule, a less public sacrifice could not well be offered. Just here, however, we have to encounter a principle of law, which we are bound to respect, as it is from high authority, and we are disposed, particularly in matters of jurisprudence, to bow with submission to the opinions of those, whose position and opportunities have led them to a thorough examination of the principle involved. The principle is this: To sustain an action in a given case, it is not absolutely necessary that *mala fides* should be proven. An action may be culpable where there is no actual intent to inflict an injury. No principle of law is more clearly settled than this. It is true, "and pity 'twas 'tis true," in this country, government has thrown around the citizen no safeguard against the licentious exercise of the medical profession. Hence, it is lawful for any and every man, whether qualified or not, to embark in the practice. The aggravation of the crime, therefore, attending the unskillful management of a case, growing out of the unlawfulness of quackery, does not obtain here, as in countries where it is prohibited by law. Hence, in their civil relations, science and empiricism stand precisely upon an equal footing. Hawkins, in his Pleas of the Crown, says, "If any person not duly authorized to practice, undertake to cure, and should kill his

patient, he is guilty of felony." This is in England, where the boundaries between science and quackery, are clearly defined by law. Again he says, "If a party employ a person as surgeon, knowing him not to be one, he has no civil remedy." This rule, however, you will observe, does not apply in this country, because government pronounces every man a surgeon who offers to practice; and the employer has no means of determining to the contrary, and therefore, if injured, has a civil remedy in an action on the case.

It is a principle well settled by legal commentators, that there is an implied contract, on the part of him who undertakes any office, employment, trust, or duty, with those who engage him, to perform it with integrity, diligence, and skill. And if, by his want of either of these qualities, any injury accrue to the employers, they have their remedy in damages, by a special action on the case.

Blackstone, in his commentaries, says, "If any officer of the public, as sheriff, jailer, &c., be guilty of neglect of duty, or a palpable breach of it; or non-feasance, or mis-feasance; if an advocate or attorney betray the cause of his client, by neglect, ignorance, or mismanagement, so that the cause miscarries, and the party is injured; if a mechanic fail to do his work in a skillful, workmanlike manner; if an inn-keeper hang out his sign, and open his house for travelers, and fail to provide comfortably for those who call on him; although in these cases, severally and collectively, there may have been no express engagement, except the general *assumpsit* which their position involves, an action lies, to recover damages, for such breach of their general undertaking."

In like manner, he who undertakes to cure, not only makes a tacit averment of his knowledge of the "healing art," but the *assumpsit* implies undertaking on his part, to exercise the art with fidelity and skill; and if injury result to the patient, by ignorance, negligence, or unskillfulness, the party injured has a remedy, in damages, by a special action of trespass upon the case. In Blackstone we have it, "the law implies a contract on the part of a medical man, as those of other professions, to discharge their duties in a skillful and attentive manner; and the law will grant redress to the party injured, by their ignorance or negligence, by an action on the case, as

for a tortious misconduct." Hence, it is clear that a benevolent intention on the part of him who inflicts the injury, will afford no protection from the penalties of the law. The law presumes the undertaker in the *assumpsit*, to be of the art, and in default, how benevolent soever his intentions, adjudges it a breach of contract, and gives a remedy in civil action.

It will be observed, that this is not an arbitrary principle of law, but simply the recognition and enforcement of that which natural justice, the animating principle of all civil government, recognizes and sanctions. It is founded on the science of man's destiny, apart from positive law, exemplified in the relation he bears to his fellow in a state of society; and forcibly vindicated in the unvarying practice of all civilized nations, by the establishment of courts of justice, to secure an observance of its wholesome inculcations, and to obtain redress for grievances, which a violation of its obligation necessarily inflicts. Take the question abstractly, therefore, upon its naked merits, or relatively in the light of positive legal enactment, the licentious exercise of the medical profession, in any country is fraught with the most disastrous consequences, and calls for the vigilance and wholesome restraints of law.

In our country, where there are no statutory provisions, regulating the practice of medicine, it is only after the mischief growing out of mal-practice has been accomplished, that the physician can be held responsible. Hence, our State has been completely inundated with every species of empiricism, and hence the greater necessity for vigilance on the part of government, to protect its citizens from imposition.

(To be continued.)

Publications received for notice since our last.—Transactions of the Medical Society of the State of New York, 1859; Microscopist's Companion, J. King, M.D.; Science and Success, a valedictory address, by H. J. Bigelow, M.D.

We are informed that Dr. L. P. Yandell, for many years a teacher in the University of Louisville, has tendered his resignation of the chair of Physiology in that Institution.

EXTRACTS FROM FOREIGN MEDICAL JOURNALS.

LETTERS FROM THE CONTINENT.

* * * Wurzburg probably first came into note on account of the distinction of its microscopists, and the originality of the views promulgated by the advanced school of pathology which was founded there by Virchow. When the microscope was first introduced into medicine, it was looked upon with suspicion and distrust; and we know that no less a man than the great physiologist, Johann Muller, could not, at first, "be convinced that there existed any necessity for physicians to acquire the ability of making microscopical examinations for themselves." * But ere long Muller changed his views, and, by his earnest labors, gave a powerful stimulus to microscopical investigations both in physiology and pathology. Following the example of patient industry which had been set by Ehrenberg, Muller, Purkinje, Schwann, Schleiden, and others, the professors and teachers at Wurzburg espoused the cause of histology; and the labors of Kolliker, Leydig, Heinrich, Muller, and Virchow, firmly established the microscope in the confidence of the professional public. And, even to this day,—in spite of the many revolutions and capricious alternations of professional opinions all over Europe; in spite of the skepticism of "practical men" of the Velpeau school, and the sneers of the purely routine practitioners,—the use of the microscope as a valuable aid to the physician, is decidedly becoming more and more common alike in Germany and in Great Britain. The microscope may now be said to have fairly stood the test of time, which "tries all;" and it would long ago have been consigned to oblivion had it been merely a fashionable scientific toy, of no practical utility. To Germany belongs unquestionably the honor, not only of having developed histology into a distinct science, out of a mass of isolated facts and unconnected observations, but also of having been the first to institute classes for teaching histology systematically in her schools of medicine. In both of these respects, France and Holland followed but slowly in her wake. In this country, systematic courses of lectures on histology were first commenced in the University of Edinburgh; for so early as the session of 1841–2,—immediately after the appearance of the remarkable researches of Schwann and Schleiden,—Professor Hughes Bennett began to teach this branch of medical study to his pupils, and to instruct them in the practical use of the microscope in medicine.

* *Vide* Johann Muller. An Eloge by Prof. Virchow. Translated and edited by A. Mercer Adam, M.D. Edinburgh: Sutherland and Knox. 1859.

The reader must not imagine, however, that Wurzburg is famous only for the opportunities it affords for the cultivation of the higher branches of scientific medicine. It is also equally distinguished for the excellence of its clinical instruction, both in practical medicine, surgery, and midwifery; and for the great facilities which the students possess for observation and study in the wards of its hospitals. Scanzoni, as a teacher of Midwifery; Bamberger, of Clinical Medicine; and Linhart, of Clinical Surgery,—better men than these are not to be found in any Continental University. So let us now enter into a few details regarding them, and some of the other notabilities of Wurzburg.

No name is better known in medical literature than that of Albert Kolliker, the Professor of Anatomy and Physiology in Wurzburg. His *Manual of Human Histology* is the standard authority on this subject; and the Sydenham Society conferred a great boon on British physicians when it made them acquainted with this book, by means of the admirable translation and most valuable editorial notes of Messrs. Busk and Huxley. This work, having now securely taken its place as one of our standard medical classics, is far beyond any praise or criticism of mine.

Mr. Addison says that "a reader seldom peruses a book with pleasure, till he knows whether the writer of it be a black or a fair man, of a mild or choleric disposition, married or a bachelor, with other particulars of the like nature that conduce very much to the right understanding of an author."* I have endeavored, in preceding "Notes," to gratify this excusable curiosity, and have occasionally offered rough pen-and-ink sketches of the celebrated medical men of the Continent; and it is my intention still to give the reader such information as is likely to interest him about the personal characteristics of the German physicians. But of Kolliker, it is almost unnecessary that I should offer any such sketch, as his face and form are quite familiar to the profession in Edinburg, London, and elsewhere in this country. A man of from forty to forty-five, with long glossy hair, once raven black, but now beginning to be of a steel-gray hue; with open intelligent countenance, delicate features, thin lips, and a kindly dark eye; with a spare and somewhat wiry form, and a firm elastic step. A man, in whose face you can trace the evidences of much hard work gone through; but from whom, vigorous as he is in the prime of manhood, the scientific world has reason still to expect great things.

I met with a very kind reception from Professor Kolliker, who showed me all that was note-worthy in his department.

*Spectator, Vol. I, No. 1.

His class-rooms, dissecting rooms, etc., etc., are in a large and handsome building, situated immediately behind the Julius-Spital, in an open space which is cultivated as a small botanic garden. Here are also the lecture-rooms, labratories, etc., of Professor Scherer, the teacher of chemistry. These occupy the ground-floor of the building, and the upper story is devoted to the anatomico-pathological museum, the historical collection, and microscopical work-rooms. The Wurzburg museum is large, and contains many rare and unique preparations—both wet and dry—in human and comparative anatomy. It is particularly rich in pathological specimens, thanks to the contributions of Heusinger, Hesselbach, Brunninghausen, and others, but specially to the zeal and industry of Virchow. In it I saw the beautiful series of preparations made by the late Professor Bernard Heine, illustrative of his celebrated experiments on the formation of a new bone from periosteum. Here we see the femur of a dog, formed entirely of new bone, which was developed from periostum eleven months after the extirpation of the original bone; and there is a rib similarly developed seven months after the operation. Heine cut away all the bones of the right fore leg of a dog, leaving the periosteum behind. Fourteen months afterwards, a new scapula, with a perfect articular surface, was formed, and similar development of new bone took place, a few months after the resection, at the site of all the other bones. The beautiful dried preparations of these curious results are preserved with great care, and are shown with a justifiable pride. I heard that the French Government had offered to purchase the series for a Parisian museum, but that the Wurzburg Faculty had properly declined to part with them. There is a large collection of urinary calculi here—among which, is one with a musket bullet for its nucleus. In osteology, there is a good display of rachitic skeletons, deformed pelves, and interesting hydrocephalic and abnormal skulls. Among the latter is a curious case of atrophy of several of the cranial and facial bones, as a result of a peculiar hypertrophic skin disease, called "Leontasis," in which a mass of long warty growths fringed the head and face like the mane of a lion. The most interesting crania, however are those collected by Virchow to illustrate the varieties of race, and his theories about the development of the skull and the peculiarities of the facial angle in Cretins, most of which have been figured by him in his various monographs. The microscopical preparations here, are worthy of the most careful study—and among them are some beautiful injections.

I congratulated Kolliker on the success of his important experiments on the physiological action of poisons. "I do not pretend to be a toxicologist," said he, "for your great Christison

is the only man in Europe who is truly one. But I have sought to render service to practical medicine, by showing how certain poisons really act on the organism." And he has not failed in his high aim; for the results of his carefully performed experiments throw much light on an obscure subject. He has shown the effect of such poisons as urari, upas, strychnia, opium, veratria, etc., on the muscles of the heart, and the nervous system. He found that the deadly arrow-poison of the American Indians, called urari* (also woorara and curare), causes death by paralysing the nerves of respiration; that it destroys the excitability alike of the motor and sympathetic, without affecting the functions of the sensory nerves; but that it does not destroy muscular irritability, or arrest the action of the heart. Conia acts in a somewhat similar manner, leaving the excitability of the muscles unimpaired, while it causes paralysis of the nerves which penetrate them. Kolliker further found that strychnia has no influence, through the blood, on the motor nerves; nor does it alter the condition of the sensory nerves, as is proved by his having poisoned frogs with the acetate, after previously dividing the ischiatic nerve of one limb. But strychnia, says he, causes paralysis of the motor nerves supplying voluntary muscles, as a result of their over-excitement during the tetanus induced; just as too strong currents of electricity produce loss of power in the motor nerves which they convulse. The tetanic spasms of tetanus do not affect the heart, although they make its pulsations slower. The tetanus which follows poisoning by strychnia, he believes to be caused either by irritations conveyed to the grey substance of the spinal cord by the sensory nerves, or by certain influences transmitted to it from the brain. He found that opium acts similarly to strychnia, in causing tetanus by its action upon the grey matter, and by inducing paralysis of the motor nerves as a result of their hyper-excitation. His most recent experiments have been made with the upas-tree poison (Upas Antiaris vel Toxicaria), and he found that the specific effect of this poison is at once to destroy all excitability of the muscles, and to cause immediate death by paralysis of the heart. He maintains that we have no true "blood poison," meaning thereby, one which would so change the mutual physiological relations of the elements of the vital fluid as to render its circulation positively injurious; but he holds that all poisons act on the parts which they affect through the medium of the blood. Some poisons he regards as purely nervine, in their elective affinities for specific tissues. The upas-tree poison, and perhaps veratria, are the only true muscular poisons. Nervine poisons,

*Kolliker acknowledges having got the poison for experiment from Professor Christison.

however, are divided by Kolliker into three classes, according to the mode in which they operate upon the nerves: 1st, those which act upon the grey matter, as strychnia, veratria, and opium; 2d, those which change the nerve-tubes, as urari and conein; and 3d, those which probably act in both ways, as prussic acid, nicotin, and æther. He adds the collary that there are likely excitant and paralysing agents in all the three groups.*

Such are a few of the results of Kolliker's important physiological experiments in toxicology; and believing them to be comparatively unknown in England, I have stated them at some length. On Kolliker's other recent researches, as, for example, on the absorption of fat by the glands of the alimentary canal, on the existence of a physiological fat-liver in the young of mamalia, and on the functions of the spleen,† I have no space to enlarge. They seem to cofirm satisfactorily the opinion now generally entertained of the use of the spleen, viz: that it is a blood-forming organ, which develops colorless corpuscles, and that these blood-cells (at least in young animals) become transformed into red globules, partly in the spleen, partly in the liver, and probably also in the current of the general circulation.

Virchow is no longer a Wurzburg Professor, having occupied for more than a year the Pathological chair in the University of Berlin. His loss has been seriously felt at Wurzburg, but his name will always continue to be honorably associated with the history of this medical school, which owes so much to his industry and his genius. Another eminent man, Professor Forster, of Gottigen, who is a great authority in morbid tumors, etc., goes this winter to Wurzburg, as Professor of Pathology, exchanging with Professor Otto Beckmann, of this University.—*Edinburgh Med. Jour., Jan.*, 1859.

(Concluded in next No.)

A Good Idea.—The English druggists are about adopting a hexangular bottle with deep flutings to put poisons in which are sold by retail. This is to prevent persons making mistakes by getting hold of the wrong bottle. As an additional security, the neck of the bottle is so contracted that but a drop at a time can be poured out. The very deliberate and cautious action thus produced will, it is believed, deter any one from taking over doses of medicine; while it is difficult to imagine a case in which a person could take the whole contents through mistake.

* The reader interested in these investigations is referred to Prof. Kolliker's papers in *Virchow's Archives*, vol. x.

† Verhand. der Phys. Med. Gessellsch. zu Wurzburg, Band vii., Seite 174.

CONVENTION OF MEDICAL TEACHERS.

MORNING SESSION.

At a meeting of the last National Medical Convention, held in Washington City, it was resolved, that there should be a National Convention of the Teachers from the Medical Colleges in the United States, and that they should meet in the city of Louisville, Ky., the day before the meeting of the National Medical Convention. In accordance with this resolution, they met on Monday morning, May 2, 1859, at Mozart Hall.

After prayer by Rev. J. H. Heywood, Dr. Dixi Crosby, Professor of Surgery in Dartmouth College, N. H., was called to the chair, and Dr. George C. Blackman, of Ohio, appointed Secretary.

Dr. Crosby returned his thanks to the convention in a neat and appropriate speech.

Dr. D. F. Wright offered the following resolution:

Resolved, That all members of the Faculties of Medical Colleges, now present, shall be considered members of this convention; but that when more than one from the same College is present, but one of them shall cast the vote of that institution.

A substitute was offered by Dr. Baker, of Ohio, that a committee of three, on credentials, be appointed by the chair. This substitute for the original resolution was then carried, and the chair appointed the following gentlemen to serve on that committee: Dr. Shattuck, from Massachusetts, Dr. Haskins, from Tennessee, and Dr. Baker, from Ohio.

The convention then adjourned for thirty minutes, to allow the committee on credentials time to report. At the expiration of the time, the committee reported the following Colleges as represented, with the gentlemen as delegates:

Dartmouth College, N. H.—Prof. Dixi Crosby.
Shelby Medical College, Tenn.—Profs. E. B. Haskins, and D. F. Wright.
Missouri Medical College—Prof. J. H. McDowell.
St. Louis Medical College—Prof. N. L. Linton.
Medical College of South Carolina—Prof. H. R. Frost.
Medical College of Georgia, Augusta—Prof. H. F. Campbell.
Medical Department of the Universiey of Michigan—Prof. Moses Gunn.
University of Louisville, Medical Department—L. P. Yandell and L. Powell.
Cincinnati College of Medicine and Surgery—Prof. H. Baker.
Jefferson Medical College, Philadelphia—Profs. Robly Dunglison, and Franklin Bache.
Lind University of Chicago—Prof. N. S. Davis.
Oglethorpe Medical College, Georgia—Prof. A. G. Thomas.
Medical College of Ohio—Prof. Geo. C. Blackman.
Kentucky School of Medicine—Profs. M. Goldsmith, and Geo. W. Bayless.
Iowa University—Prof. McGugin.
Medical College of Memphis—Prof. H. R. Robards.
Medical College of Virginia, Richmond—Profs. B. R. Welford, and L. S. Joynes.
Atlanta Medical College, Georgia—Profs. J. G. Westmoreland, and John W. Jones.
Medical Faculty of Harvard University at Boston—Prof. Geo. C. Shattuck,.
Rush Medical College, Chicago, Ills.—Profs. Daniel Brainard, and Joseph W. Freer.
Western Reserve Medical College, Cleveland, Ohio—Prof. G. C. C. Weber.

On motion, the report was received and the committee allowed to report further the names of delegates during the day.

The next business in order was the election of officers for the permanent organization of the convention.

On motion, the officers of the preliminary meeting were declared elected.

Prof. Crosby, in taking his seat as President, said, the convention had derived one advantage from the re-election of the present officers, as they were spared being inflicted with additional speeches of thanks. He concluded by saying that, unless changed by the convention, he had the authority to make rules for conducting business. He, therefore, ruled that no member shall speak longer than ten minutes, nor more than twice on the same subject.

A motion was offered by Dr. D. F. Wright, of Tenn., allowing all persons present from the different Medical Colleges to sit as members of this convention. This was amended by Dr. Davis, of Chicago, by adding that no College should be allowed more than one vote on any proposition. This was carried.

Dr. Davis, of Ills., offered a resolution authorizing the appointment of a committee of five, as a business committee. This being carried, the President appointed the following gentlemen: Drs. Davis, of Ills., Gunn, of Michigan, Frost, of S. C., Shattuck, of Mass., and Yandell, of Louisville, Ky.

The convention then adjourned for thirty minutes, to allow the committee time to prepare business.

At the expiration of the time, the committee reported six resolutions, which were accepted from the committee, and were, on motion, brought up in order. The following are the resolutions:

Resolved, That this convention recognise the great advantages to be derived from the action of the American Medical Association in prescribing the terms and conditions on which medical degrees shall be conferred and licenses to practice medicine shall be granted, and that any expression of opinion as to methods or periods of instruction from the Americal Medical Association should be received with deference and respect, and that all pains should be taken to enforce any rules or regulations recommended by that body.

Resolved, That this convention earnestly recommends the American Medical Association to adopt such measures as will secure the efficient practical enforcement of the standard of the preliminary education, adopted at its organization in May, 1847, and that the Medical Colleges will cheerfully receive and record the certificates alluded to in said standard, whenever the profession generally, and the preceptors, will see that students are properly supplied with them.

Resolved, That no Medical College should allow any term of practice to be a substitute for one course of lectures in the requisitions for graduation.

Resolved, That hospital clinical instruction constitutes a necessary part of medical education, and that every candidate for the degree of Doctor of Medicine should be required to have attended such instruction regularly for a period of not less than *five months*, during the last year of his period of pupilage.

Resolved, That every Medical College should rigidly enforce the rule requiring three full years of medical study before graduation, and that the diploma of no Medical College shall be recognised which is known to violate this rule.

The first resolution created some degree of excitement, and provoked considerable debate, when the convention adjourned until three o'clock.

AFTERNOON SESSION.

The debate still continued on the first resolution, as reported in the forenoon. Dr. Bayless, who had the floor at the time of adjournment, offered the following amendments — to substitute, in the fourth line, the word "recommended" for "prescribe," and all after the words "deference and respect" be stricken out.

The debate on this resolution still continued warm, most of the gentlemen participating, when Dr. Joynes offered the following as a substitute:

Whereas, It appears that a large portion of the Medical Colleges of the United States are unrepresented in this convention, that no changes in the present system of education can be effected unless adopted by the schools generally.

Resolved, That it is inexpedient at this time to take any action upon the propositions contained in the report presented by the special Committee on Medical Education at the last meeting of the American Medical Association.

Resolved, That with the view of obtaining a more general union in counsel and action upon this important subject, this convention do now adjourn to meet again on the day preceding the next annual meeting of the Medical Association, and at the place which may be agreed upon for such meeting, and that the several Medical Colleges in the United States be requested to appoint each a delegate to such adjourned meeting of this convention.

An amendment was offered by Dr. Wright, by adding another resolution to the effect that a committe be appointed to examine the different propositions offered. The vote of the Colleges being called on this resolution, the vote stood ten for the substitute and nine against.

The following gentlemen were appointed by the chair to serve on that committee: Dr. L. P. Yandell, of Louisville; Dr. G. Shattuck, of Massachusetts; Dr. G. C. Blackman, of Ohio; Dr. H. F. Campbell, of Georgia, Dr. M. Gunn, of Michigan.

The meeting was then adjourned.

TWELFTH ANNUAL MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

LOUISVILLE, MAY 3, 1859.

The Association convened in Mozart Hall, at 11 o'clock, A. M., and was called to order by the President, Dr. Harvey Lindsly in the chair, supported by Vice Presidents Drs. W. L. Sutton and T. O. Edwards. The other officers present were the Secretaries, Drs. A. J. Semmes and S. M. Bemiss, and Treasurer Caspar Wister.

The President introduced Rev. Stewart Robinson, of Louisville, who opened the proceedings with prayer.

The chair then declared the Association duly organized, and announced as first in order of business the report of the Committee of Arrangment.

Dr. R. J. Breckinridge, chairman of this committee, reported as follows:

Mr. President and Gentlemen of the Association:

It is my grateful office to greet you on this your Twelfth Anniversary, and tender you a hearty welcome to the city of Louisville. I do this, sir, in behalf of the physicians and citizens generally—citizens, second to none in their intelligent appreciation of the honor and dignity of the profession, and the worthiness and usefulness of its members;—physicians, second to none in their devotion to the great work in which they are engaged.

We have watched, sir, with interest the formation and progress of this Association. We have noted, with equal gratification, the catholicity of its spirit, and the greatness of its designs. We have seen it, in its brief existence, gather into its fold thousands of members—members from every State of the Republic, and without possessing real legislative powers, exercise a most potent influence for good.

Formed for the advancement of science and art—for the gathering, interchange, and diffusion of knowledge—for the promotion of fellowship and harmony in the profession, by drawing closer and closer its members, it has *not* wholly failed in the accomplishment of its aims; and we trust for it a future yet more fruitful—harvests yet more abundant.

Feeling that "it is good for us to be here"—approving, thoroughly, cordially, the objects of the Association—and believing in its capacity for usefulness—we bid you God speed in your labors, while we heartily welcome you, as honored guests, to our homes.

Dr. J. B. Flint, chairman of a committee appointed by the State Medical Society of Kentucky to receive the American Medical Association, accompanied by Drs. W. L. Sutton, C. H. Spilman, W. S. Chipley, and W. C. Snead, came forward and addressed the Association as follows:

Mr. President:

At a late annual meeting of the "State Medical Society of Kentucky," the following resolution was unanimously adopted, and the gentlemen before you, all of them ex-Presidents of the Society, constituted a committee charged with carrying it into effect:

Resolved, That J. B. Flint, with such associates as he may seelect, be a committee to wait upon the American Medical Association, so soon as it shall have opened its session in Louisvifle, and in behalf of this Society bid it welcome to the medical jurisdiction of Kentucky, assure it of the cordial interest of the profession of the State in the objects and purposes of its institution, and of the readiness of this Society to co-operate in all its endeavors to promote the honor and usefulness of our common calling.

In regard to assurances of welcome, Mr. President, so far as they apply to yourself and your associates as individual guests of your Kentucky brethren, those gentlemen would hardly pardon me for adding a word to the general terms of the resolution. Already, if I mistake not, there are demonstrations of the spirit of hospitality, which render any assurance on that subject worse than superfluous.

But I am happy to assure you, Mr. President, that the Association over which you preside, in its corporate capacity, with its well known purposes and ends, will find an equally cordial reception in the generous community which it has honored with its presence. The people of Kentucky, sir, are generally prepared to appreciate as it deserves every enterprise of a public spirited or philanthropic character which presents itself to their notice, and I think I may say especially disposed to befriend the cause of medical education. They have certainly done somewhat, not a little, to their credit in evidence of their intelligent interest in medical science and the best means of its advancement. Through the munificence of the State, in one case, and of the liberal city of Louisville in the other, two medical libraries have

been procured in Kentucky, each of which is superior to any and all the public collections of medical books that can be found in most of the other States of the Union. Not more than two of our sister States, so far as I can learn, can be compared with us in this interesing particular.

One of those libraries, belonging to the Medical Department of the University of Louisville, at its best estate, numbering 4,000 volumes, you will doubtless visit during your sojourn among us, and, although much defaced and mutilated by the conflagration which laid that institution in ruins two years ago, you will still find it to be a large and choice collection—adequate to the requisitions of medical research, and presenting satisfactorily the course of medical literature from the time of Hippocrates to the present day.

The other library to which I refer belongs to the Medical Department of Transylvania University, and contains 8,000 volumes. I hope that not a few of the members of the Association before leaving Kentucky will find their way into that also, in the course of a visit to the beautiful inland city in which it is located—a city distinguished throughout the land for the general intelligence and refinement of its population, as well as for the eminent public men who have signalized it as their home; but to medical men, not only of our own, but of foreign countries, especially memorable as the residence of the great lithotomist of our day and surgical patriarch of the West—Benjamin W. Dudley.

Such benefactions as these to the means of medical study attest, as I have already intimated, so enlightened an interest in the improvement of our profession as to guaranty not only a welcome to the Association which represents it, but efficient co-operation in its endeavors on the part of the profession and the people of Kentucky.

May your present session, Mr. President, be an agreeable one to the members of the Association, and prove eminently beneficial to the interests of American medicine.

The Secretary then called the roll.

The President now announced a recess of fifteen minutes to enable the various State delegations to choose their members for the committee on nominations.

Upon call to order the following members were reported as the Nominating Committee:

New Hampshire, Dixi Crosby; Massachusetts, Solomon D. Townsend; Rhode Island, J. H. Eldridge; New York, D. M. Reese; New Jersey, A. N. Dougherty; Pennsylvania, R. K. Smith; Delaware, H. F. Askew; Maryland, G. W. Lawrence; District Columbia, Cornelius Boyle; Virginia, L. S. Joynes; North Carolina, Edward Warren, Jun.; South Carolina, J. M. Gaston; Georgia, John W. Jones; Alabama, J. B. Coons; Louisiana, S. O. Scruggs; Tennessee, E. B Haskins; Kentucky, D. D. Thomson; Ohio, George Fries; Indiana, J. H. Brower; Michigan, William Brodie; Illinois, C. Goodbrake; Missouri, M. L. Linton; Iowa, D. L. McGugin; Wisconsin, C. B. Chapman; Army, Charles S. Tripler.

The President then appointed the following committee on voluntary essays: Drs. L. P. Yandell, of Kentucky, James Bryan, of Philadelphia, and C. G. Comegys, of Ohio.

Dr. R. J. Breckinridge, from the Committee of Arrangements, announced the hours of business from 9 A. M. to 1 P. M., and from 3 P. M. until such hour as the Convention should adjourn upon resolution.

Dr. Harvey Lindsly, the president of the Association, then read his retiring address, which was listened to with marked attention, and was an eloquent tribute to the dignity of the medical profession and the importance of its improvements.

Dr. L. A. Smith, of New Jersey, moved that the thanks of the Association be tendered to the President for his able and eloquent address, and it was ordered to be placed in the hands of the appropriate committee for publication, among the proceedings of the meeting.

Dr. Caspar Wister, chairman of the Committee on Publication, read the annual report, and on motion of Dr. Sayre, of New York, the following resolutions appended to it were adopted:

Resolved, That hereafter every paper intended for publication in the Transactions must not only be placed in the hands of the Committee of Publication by the first of June, but it must also be so prepared as to require no material alteration or addition at the hands of the author.

Resolved, That authors of papers be required to return their proofs within two weeks after their reception, otherwise they will be passed over and omitted from the volume.

Adjourned until 3 o'clock, P. M.

AFTERNOON SESSION, 3 O'CLOCK.

Dr. W. L. Sutton, one of the Vice Presidents, took the chair in the absence of the President.

Dr. D. Meredith Reese, of New York, chairman of the Committee on Nominations, reported the following officers for the ensuing year :

President—Henry Miller, of Kentucky.

Vice Presidents—H. F. Askew, Delaware ; Chas. F. Tripler, U. S. Army ; L. A. Smith, New Jersey ; Calvin West, Indiana.

Treasurer—Caspar Wister, Pennsylvania.

Secretary—S. M. Bemiss, Kentucky.

Dr. Sayre moved the adoption of the report, which was unanimously agreed to.

Dr. Brainard, of Illinois, moved the appointment of a committee to conduct the newly appointed officers to their respective chairs. The acting President selected Drs. Brainard, of Illinois, Mattingly, of Kentucky, Sutton, of Indiana, McDowell, of Missouri, and R. J. Breckinridge, of Kentucky, and they accordingly performed the duties assigned to them.

The newly elected President, on taking the chair, addressed the Convention in substance as follows :

Gentlemen of the American Medical Association :

I am wholly at a loss to command language to express the deep sense of obligation put upon me by calling me to the presidency of your Association. It is an honor any man may well be proud of, and although I admit, in all sincerity, that you might without difficulty have selected an individual more worthy the position, I may be allowed to say you could not have conferred it upon one who would prize it more highly or cherish it longer with the most grateful recollection. I do esteem it the greatest honor ever conferred upon me by the profession that I love, and to which I have devoted a long life ; nay, more, it is the greatest honor that could be conferred upon any man by the medical or any other profession in this or any other country ; for any decoration of honor or any mark of approbation conferred by a crowned head I should regard as a bauble in comparison. Who are you, gentlemen, when rightly considered ? You are the rightful representatives of the great American Medical Profession—an army forty thousand strong, and a body of men, no matter what captious criticism may say in disparaging comparison with the European branch of the profession, in my humble judgment, far superior to the same number of medical men to be found in any quarter of the globe. Although as a body you may not be so learned, so critically and nicely framed in all the minutiæ of the profession, yet for strength, integrity, and precision in all the great principles guiding to a successful combat with disease, this body is equal if not superior to that of any kingdom of continental Europe.

To be called to the presidency of such a body of men, is, in my sober judgment, the greatest compliment that could be conferred on mortal man, provided that man is a devotee of medicine, who has given his whole mind, soul, heart, and strength individually to the profession, and has that high regard for it which will not suffer any less noble pursuit to interfere with the daily though laborious duties of the profession.

Coming, so recently, from a sick bed, and still enfeebled in health, I beg to be excused from further remarks, and desire you to accept this brief and imperfect acknowledgment of the distinguished honor conferred upon me, instead of what, under other circumstances, I might be disposed to say.

Dr. R. J. Breckinridge moved that the thanks of the Association be tendered to the retiring officers for the faithful and assiduous manner in which they have conducted the business committed to their charge, which was unanimously adopted.

Several names were now offered as candidates for membership by invitation, when

Dr. T. O. Edwards moved that no person be admitted as a member by invitation unless his good standing in the profession be vouched for by some member of the Association, which was adopted.

Dr. Eve moved a reconsideration of the motion by Dr. Edwards, which carried.

And upon motion of Dr. Edwards, all applications for membership by invitation were referred to the Committee of Arrangment and Credentials.

Dr. J. B. Lindsly, of Tennessee, offered the following :

Resolved, That a committee of three be appointed by the chair to inquire into and report upon the propriety of dividing the Association into sections for the purpose of performing such parts of its scientific labors as may relate to particular branches of medicine and surgery.

Dr. Brodie moved its reference to the Nominating Committee.

Dr. Brainard explained at some length the object of the resolution of inquiry, and urged its adoption as the means of giving more effect and usefulness to the proceed-

ings of the Association, the reports of which had heretofore gone out unmatured, in consequence of the want of concentrated action.

A motion by Dr. Sayre to lay the motion on the table was negatived, and the motion of Dr. Lindsly was then adopted.

The chair appointed as the committee, Dr. Lindsly of Tennessee, Dr. Brainard of Illinois, Dr. G. C. Blackman of Ohio.

Dr. Davis moved that no person be permitted to speak more than twice on the same subject, or more than ten minutes at one time, except by consent of the Association, which was adopted.

The Committee on Prize Essays was called, but the chairman being temporarily absent, was postponed.

The Committee on Medical Education failed to report.

The Committee on Medical Literature failed to report.

A letter from Dr. J. G. F. Holston, of Ohio, chairman of the Special Committee on the Microscope, was read, reported progress and begging a continuance for more extended investigation, which was referred to the Committee on Nominations.

A letter from Dr. Stephen Smith, of New York, from the Special Committee on Medical Jurisprudence, had the same reference.

The Special Committee on Quarantine was not ready to report.

Dr. Mattingly, of Kentucky, from the Special Committee on Diseases and Mortality of Boarding Schools, asked a continuance until next year, in order to obtain further information requisite to the full investigation of the important subject. The request was referred to the Committee on Nominations.

The Special Committee on Surgical Operations for the relief of defective vision, on milk sickness, and on the blood corpuscle, had the same reference.

The following report from the Committee on Medical Ethics was read, and such portion of it as related to the action of the Dubuque Medical Society in the case of an expelled member, was, on motion of Dr. T. O. Edwards, made the special order for 12 M. tomorrow.

To the American Medical Association:

The Committee on Medical Ethics beg leave to state that, of the subjects referred to them at the last meeting of the Association, they find the following notice in the minutes:

"Dr. Grant, of New Jersey, presented a complaint made by the Newark Medical Society against the New York Medical College, for a violation of the ethics of the profession. Dr. Edwards, of Iowa, presented a similar complaint; and Dr. Oakley, of New Jersey, a complaint from the Union and Essex County Medical Society."

Transactions, Vol. XI. p. 41.

Upon these several complaints your Committee beg leave most respectfully to report:

That the two complaints from the Medical Societies of New Jersey refer only to one and the same grievance, the particulars of which are set forth in a memorial which was presented to the American Medical Association on the 6th of May, 1858, and which is entitled, "Statement of the Newark Medical Association in Reference to a Diploma granted by the New York Medical College."

The facts stated in the memorial which is now appended to this report, were, during the last annual meeting of the American Medical Association, examined as carefully as time and opportunity would allow. The charges therein contained against the New York Medical College were admitted to be true by Dr. Horace Green, President of said College, who, in apology for the same, submitted a written statement to yonr Committee, which was at the time accepted as satisfactory by the gentlemen then present before your Committee on behalf of the parties aggrieved; and being afterwards presented with a verbal report by the Committee, was received and entered upon the minutes in the following terms:

"Whereas, it appears from undoubted testimony that the New York Medical College have conferred the degree of Doctor of Medicine upon a notorious quack of the name of John F. Dunker, of Newark, the Faculty, in the person of the President of said College, wish here to declare, that the degree was obtained under gross deception and false testimonials furnished by said Dunker and his friends; and they therefore revoke and annul his diploma, and declare said Dunker to be unworthy of patronage or support from authority conferred upon him by this diploma."

Transactions, Vol. XI. p—.

These complaints being thus disposed of, your Committee have only to add in reference to them that the memorial presented to the American Medical Association from the Newark Medical Association is worthy of special notice, as setting forth the negligent manner in which mere verbal and hearsay statements are at times

accepted in place of authentic written testimonials, from individuals presenting themselves as candidates for the honors of our profession at some of the Medical Colleges of this country. In this respect there is reason to believe that the New York Medical College does not stand alone: and the publication of the accompanying memorial may be of service in putting a permanent check to this crying evil.

The only other complaint referred to your Committee was that presented by Dr. Edwards, of Iowa, preferring a charge from the Dubuque Medical Society against one of her members who had been expelled for an alleged infraction of the code of medical ethics. This complaint does not appear to be of such a character as to require adjudication here. It has since the last annual meeting of the American Medical Association been adjudged by the Iowa State Medical Society [see transactions of the annual meeting of said Society, published at Dubuque, Iowa, 1858,] and having been then settled in the state in which the parties reside, it should now be dismissed.

All of which is respectfully submitted.

JOHN WATSON, M.D., Chairman.

New York, April 28, 1859.

Continuances were asked by the Committees on the Pons Varolii, Medulla Oblongata, and Spinal Marrow—their Pathology and Therapeutics; on American Medical Necrology; on the Hygienic relations of Air, Food, and Water, the Natural and Artificial causes of their impurity, and the best methods by which they can be made most effectually to contribute to the Public Health; on the effect of the Virus of Rattlesnakes, &c., when introduced into the System of the Mammalia; on the Climate of the Pacific Coast, and its Modifying Influences upon Inflammatory Action and Diseases Generally; on the Constitutional Origin of Local Diseases, and the Local Origin of Constitutional Diseases; on the physiological Effects of the Hydro Carbons; on Epilepsy; on the Causes of the Impulse of the Heart, and the Agencies which influence it in Health and Disease; and on the best substitute for Cinchona, and its Preparations in the Treatment of Intermittent Fever, &c.; all of which were referred to the Committees on Nominations.

The Special Committee on Government Meteorological Reports made a report, written by Dr. R. H. Coolidge, of the U. S. Army, but read by Dr. Paul F. Eve, of Tennessee, which was referred to the Committee on Publication.

The Committee, appointed in May, 1857, on Criminal Abortion, submitted a report written by Dr. Storer, of Boston, which was read by Dr. Blatchford, of New York, and referred to the Committee on Publication. The following resolutions appended to this report were unanimously adopted:

Resolved, That while physicians have long been united in condemning the act of producing abortion, at every period of gestation, except as necessary for preserving the life of either mother or child, it has become the duty of this Association, in view of the prevalence and increasing frequency of the crime, publicly to enter an earnest and solemn protest against such unwarrantable destruction of human life.

Resolved, That in pursuance of the grand and noble calling we profess — the saving of human lives — and of the sacred responsibilities thereby devolving upon us, the Association present this subject to the attention of the several Legislative Assemblies of the Union, with the prayer that the laws by which the crime of procuring abortion is attempted to be controlled may be revised, and that such other action may be taken in the premises as they in their wisdom may deem necessary.

Resolved, That the Association request the zealous co-operation of the various State Medical Societies in pressing the subject upon the Legislatures of their respective States, and that the President and Secretaries of the Association are hereby authorized to carry out by memorial these resolutions.

The Convention then adjourned till to-morrow morning at 9 o'clock.

SECOND DAY.

Wednesday, May 4, 1859.

The President, Dr. Miller, called the Association to order at 9 o'clock.

Dr. D. Meridith Reese, chairman of the Committee on Nomination, called attention to the fact that the committee could not act definitively until the place for next year's meeting should be designated. He stated also, that the Medical State Society of Connecticut, had requested that an amendment to the constitution proposed two years since, should be taken from the table, relative to the time of meeting.

It was moved by Dr. Blatchford, and seconded by Dr. Sayre, that the amendment

to the third article of the constitution be taken up, which proposes to add after the words "first Tuesday of May" the words "or first Tuesday of June," and after the words "shall be determined" add the words "with the time of meeting."

The amendment was adopted by a constitutional vote.

Dr. D. M. Reese also stated that the Connecticut State Society had extended a pressing invitation to the Association to hold its next meeting at New Haven, which invitation was referred to the Committee on Nominations.

Dr. Reese also called attention to the necessity of some radical change in the mode of appointing committees to prepare treatises on scientific subjects to be reported at the annual meetings. It had been seen, that on yesterday, a large majority of the committees made no reports and did not even see proper to send in any communication explanatory of delay. The difficulty heretofore has originated in the mode of selection adopted by the nominating committee. It has been customary for gentlemen to hand in their names and the proposed subjects, on slips of paper, and the committee without further investigation, have so published in the annual reports. Thus it has happened that appointments have been most injudiciously made, and gentlemen to whom a special duty has been assigned, have been found to know less of that than any other subject. We therefore hoped that no committee of last year would be re-appointed or continued, from which no report had been had and no communication received.

On motion, the Nominating Committee was unanimously instructed to act upon the suggestions of the chairman, who also stated, that there should be some definite expression of disapprobation as to the course of these gentlemen who had volunteered essays, and had their names reported in the newspapers and spread over the land and then paid no attention to the matter.

Dr. Flint, from the Committe on Prize Essays, begged leave to report that they received four dissertations in time for a careful and thorough examination, and two others, quite voluminous, only two days before the meeting of the Association. The latter we have felt constrained to exclude altogether from the competition of the present year on account of the absolute impossibility of reading them with a critical purpose and effect. The others have been carefully examined by all the surviving members of the committee — one estimable associate, Dr. Evans, having been called from all his earthly labors before the active duties of the committee began.

More than one of the four essays we examined exhibited much labor, and a commendable scholarship in their preparation — are voluminous, and in some respects very meritorious papers; but in the unanimous judgment of the committee neither of them possesses the degree and species of merit which should entitle its author to the Association prize.

The committee beg leave furthermore to report, that in their opinion and as the suggestion of their own recent experience, the Association should determine in more precise and formal manner than has yet been done, the terms and conditions of competition and of success in the contest for prizes, for the government alike of contestants and the committee of adjudication, and that a committee be now appointed to consider and report upon that subject.

Dr. Gordon, chairman of Committee on Etiology and Pathology of Cholera, made a partial report, and asked continuance of time.

On motion, the report was accepted, and referred to Committee on Publication, and petition for continnance referred to Nomniating Commiitee.

Dr. J. B. Lindsly, chairman of the committee appointed to inquire into the propriety of dividing the Association into sections, for the better performance of its work in considering the various branches of medicine and surgery, recommended the adoption of such a plan as being indispensably necessary to making this body a working scientific association. They do not deem it necessary to enter into any argument in favor of this plan, it being the one already universally adopted by similar bodies. They would simply recommend, for the present, a division into the following sections, as being most suitable to facilitate the transaction of business, viz:

1. Anatomy and Physiology.
2. Chemistry and Materia Medica.
3. Practical Medicine and Obstetrics.
4. Surgery.

The committee do not propose that this subdivision of labor shall in any manner interfere with the regular business of the Association as now conducted; but only that after having assembled each day in general session, each section shall meet separately for the purpose of hearing and discussing papers on such subjects as properly belong to them, and they therefore recommend that the Committee of Arrangements for the ensuing year, be requested to provide suitable accommodations for the services of these sections, and that each of said sections shall be authorized

to make such arrangements as may be required for the proper transaction of its business.

This report was considered and adopted after a very able speech in its support, by Dr. Davis.

Dr. J. W. Singleton, of Ky., moved the suspension of the rules for the introduction of the following:

Resolved, That in the death of Dr. A. Evans, of Kentucky, the Association has lost one of its most manly and efficient members, and society a friend and benefactor.

The resolution was unanimously adopted.

Dr. W. L. Sutton, under the resolution appointing a committee on registration of births, marriages, &c., proposed a plan of general action, an abstract of which he read on motion of Dr. Gibbs, of South Carolina, and on motion of Dr. L. P. Yandell, the subject was referred to a committee to report during the present session.

Drs. W. L. Sutton, J. B. Lindsly, R. W. Gibbs, jr., James Bryan, Z. Pitcher, and G. C. Shattuck, were appointed such committee.

A report from Dr. Thomas Logan, of California, on Medical Topography and Epidemics, was received, and referred to the Committee on Publication.

The chairman of the Committee on Voluntary Essays stated that he had received a paper on a case of extra-uterine fœtation from Dr. Enos Hoyt, of Transylvania, Mass., and another on a case of accidental poisoning by strychnine, from Dr. Douglas Bly, of Rochester, N. Y. He also presented a very voluminous paper entitled, "Observations on some of the changes of the Solids and Fluids in Malarial Fever, by Joseph Jones, Prof. of Medical Chemistry in the Medical College of Georgia, at Augusta."

By request, Prof. Jones gave a verbal abstract of his paper and an exposition of his theory, and on motion of D. W. Yandell, the communication was referred to the Committee on Publication.

Dr. D. W. Yandell, announced that the following railroad companies had agreed to pass delegates to this convention over their roads at half price: Pittsburg, Fort Wayne, and Chicago; Pennsylvania Central; Jeffersonville; New Albany and Salem; Louisville and Nashville, and Cleveland and Pittsburg.

On motion, a vote of thanks was tendered to these companies for their liberality.

Dr. J. B. Flint offered the following resolution:

Whereas, Our brethren of Great Britain are engaged in erecting a monument to the memory of John Hunter, whose invaluable services in behalf of Physiology and Surgery are recognized and honored, as well on this side of the Atlantic, as in Europe; and whereas, this Association, as the representatives of American Medicine, would rejoice in some suitable manner to participate in so grateful a testimonial of gratitude and respect; therefore

Resolved, That a committee of three be appointed, to consider in what manner this participation can best be effected, so as to be acceptable to our British brethren, and consistent with our own means and opportunities of action, with instructions to report at the next annual meeting.

The resolution was adopted, and Drs. Flint, Bowditch, and Shattuck appointed as the committee.

Dr. Harvey Lindsly offered the following:

Whereas, Parliamentary rules of order are numerous, complicated, sometimes obscure, and often inapplicable to such a body as the American Medical Association, and whereas, from the nature of the pursuits of medical men, they cannot be familiar with these rules; therefore

Resolved, That a select committee of three members be appointed to prepare a system of rules for the government of this Association, as few in number, as concise and as perspicuous as possible, to be reported at the next annual meeting.

This resolution was adopted, and Drs. H. Lindsly, C. G. Comegys, and T. W. Blatchford appointed as a committee.

The paper of Dr. Bly, on Accidental Poisoning by Strychnine, was read by its author, and as individual cases are not reported in the Transactions (except as illustrations of principles) of the Association, thanks were returned for the communication, with a request that it be published in some medical journal.

The Nominating Committee made the following report:

The next annual meeting to take place at New Haven, on the first Tuesday of June, 1860. Dr. Eli Ives to be junior Secretary.

Committee of Arrangements — Drs. Charles Hooker, Stephen G. Hubbard, and Benjamin Sullivan, jr., with power to add to their numbers.

Committee on Prize Essays — Drs. Worthington Hooker, Conn.; G. C. Shattuck, Mass.; Usher Parsons, R. I.; P. A. Jewett, Conn.; and John Knight, Conn.

Committee on Publication — Drs. F. G. Smith, and E. Wistar, Philadelphia, Pa.;

S. M. Bemiss, Louisville, Ky.; E. Ives, New Haven, Conn.; Hollingsworth and Hartshorne, Philadelphia, Pa.; and Askew, Wilmington, Del.

Committee on Medical Literature — Drs. Henry Campbell, Ga.; D. F. Wright, Tenn.; G. Wendell Holmes, Mass.; S. G. Armor, Ohio, and W. H. Byford, Ill.

Committee on Medical Education — Drs. D. M. Reese, N Y.; W. K. Bowling, Tenn.; Chas. Fishback, Ind.; John Bell, Penn; Z. Pitcher, Mich.

The following Special Committees were appointed:

On Morbus, Coxarius, and Surgical Pathology of Articular Inflammation — Dr. Lewis A. Sayre, of New York.

On the Surgical Treatment of Strictures of the Urethra — Dr. James Bryan, of Philadelphia.

On Drainage and Sewerage of Large Cities, their Influence on Public Health — Dr. A. J. Semmes, D. C., chairman, Cornelius Boyle, and G. M. Dove.

On Puerperal Tetanus, its Statistics, Pathology, and Treatment — Dr. D. L. McGugin, of Keokuk, Iowa.

On Hospital Epidemics — Dr. R. K. Smith, of Philadelphia.

On Puerperal Fever — Dr. S. N. Green, of Stilesville, Ind.

On Anœmia and Chlorosis — Dr. H. P. Ayres, of Fort Wayne, Ind.

On Veratrum Viride — Dr. James B. McCaw, of Richmond, Va.

On Alcohol, its Therapeutical Effects — Dr. J. W. Dunbar, of Baltimore, Md.

On Meteorology — Dr. J. G. Westmoreland, Atlanta, Ga.

On Milk Sickness — Dr. Rob't Thompson, Columbus, Ohio.

On Manifestations of Disease of Nerve Centres — Dr. C. B. Chapman, Wisconsin.

On the Medical Topography of Iowa — Dr. T. O. Edwards, Iowa.

On Microscopic Observations on Cancer Cells — Dr. Geo. D. Norris, New Market, Alabama.

On the Philosophy of Practical Medicine — Dr. Jas. Graham, Cincinnati, Ohio.

On Some of the Peculiarities of the North Pacific, and their Relations to Climate — Dr. Wm. H. Doughty, Ga.

The following Special Committees were continued or altered:

On Microscope — John C. Dalton, jr., N. Y.; David Hutchinson, Ind,; A. R. Stout, Cal.; Calvin Ellis, Mass., Christopher Johnston, Md.

On Diseases and Mortality of Boarding Schools — Dr. C. Mattingly, Ky.; and Dixi Crosby, N. H.

On the Various Surgical Operations for the Relief of Defective Vision — Drs. M. A. Pallen, Mo., T. J. Cogley, Ind., and W. Hunt, Penn.

On the Blood Corpuscle — Dr. A. Sager, Michigan.

On American Medical Necrology — Dr. C. C. Cox, Maryland.

On the Hygienic Relations of Air, Food, and Water, the Natural and Artificial Causes of their impurity, and the best methods by which they can be made most effectualy to contribute to the Public Health — Dr. C. C. Cox, Maryland.

On the Effect of Virus of Rattlesnake, &c., when introduced into the system of Mammalia — Dr. A. S. Payne, Virginia.

On the Climate of the Pacific Coast, and its Modifying Influences upon Inflammatory Action and diseases generally — Dr. O. Harvey, California.

On the Constitutional Origin of Local Diseases, and the Local Origin of Constitutional Diseases — Drs. W. H. McKee, of North Carolina, and C. F. Heywood, of New York.

On motion of Dr. Brodie, Dr. A. J. Semmes was requested to serve as Secretary pro tem. during the remainder of the session.

The Association took up the special order, being the report on Medical Ethics, to which had been referred the action of the Dubuque Medical Society, which, after debate, was laid over until 12 o'clock to-morrow.

On motion of Dr. H. F. Campbell, a section of meteorology, medical topography, and epidemic diseases, and of medical jurisprudence and hygiene was added to those already adopted by this Association.

The Association then proceeded to consider and act upon amendments to the Constitution proposed at the last annual meeting and laid over under the rules. The following amendment was adopted:

Resolved, That the Constitution of this Association be so amended as to provide, that no individual who shall be under sentence of expulsion or suspension from any State or Local Medical Society, of which he may have been a member, shall be received as a delegate to this body, or be allowed any of the privileges of a member, until he shall have been relieved from the said sentence by such State or Local Society.

The next amendment, lying over from last year, was the proposition of Dr. Kyle, of Ohio.

That the Constitution of the Association be so amended as to prohibit the admis-

sion as a delegate or the recognition as a member of any person who is not a graduate of some respectable medical college.

This amendment was rejected, but, on the question of reconsideration, a long and animated debate ensued. Without arriving at a vote, the Association adjourned for dinner.

The following gentlemen have been admitted to the Association as members by invitation:

Indiana—B. C. Bowan, N. D. Field, John S. Rowe, R. Curran, D. Wiley, J. A. Windle, A. V. Talbot, J. W. Davis.

Ohio—W. C. Hall, N. B. Davis.

Tennessee—J. M. Brannoch.

Kentucky—W. N. Gaither, S. B. Fields, W. S. Cain, J. A. Hodge, S. B. Merrifield, Joshua Gore, H. M. Berkeley.

Missouri—J. M. Allen.

Alabama—Dr. N. Bozeman, Dr. Turney.

New Hampshire—David Kay.

On motion adjourned until 3 P. M.

AFTERNOON SESSION.

The Association was called to order at 3 P. M., Dr. M. F. Askew in the Chair. The discussion on the amendment under consideration at the hour of adjournment was renewed.

Dr. Kincaid moved a further amendment to insert the word "hereafter" after "prohibiting."

The Chair ruled the amendment out of order at the present stage, or until the Association decides upon the question of reconsideration.

After a long discussion, Dr. Davis, of Ind. moved to lay the motion to reconsider on the table, which was carried, 97 yeas, nays not counted, so the amendment stands registered.

The next proposed amendment to the constitution was that suggested by the New Jersey Medical Society, asking for such changes as would establish a Board of Censors in every judicial district of the Supreme Court, who should examine and grant diplomas to all proper members of the Association.

This was temporarily laid on the table for Dr. Crosby to offer a report of the Medical Teachers' Convention which met on Monday last. He strongly recommended a committee from this body to confer with the Teachers' Committee, and felt great confidence that something beneficial to medical education would be the effect of such conference.

Dr. Comegys moved the appointment of a committee of five to confer with the Committee of Medical Teachers and report at the next annual meeting, provided that no Medical Teacher be selected on the part of this Association.

Dr. T. M. Blatchford, of New York, offered as a substitute the following preamble and resolution:

WHEREAS, of all the subjects which can engage our attention in our associate capacity, that of Medical Education is paramount; and WHEREAS, harmony of action is essential to success in establishing definite qualifications entitling to admission in our ranks; and WHEREAS, nothing can be gained by hasty action in a matter so vital to our very existence, as a permanent Medical Institution. Therefore,

Resolved, That further action be suspended for the present upon the subject of the resolutions offered at the last meeting of the Association. by the Chairman of the special committee on medical education, and that a committee, consisting of S. W. Butler, of Pennsylvania, L. A. Smith, of New Jersey, Dixi Crosby, of New Hampshire, C. A. Pope, of Mo., and T. Buckler, of Maryland, shall be appointed to confer with the Committee appointed at the meeting of Medical Teachers, to report some plan for action at the next meeting of the Association.

This amendment was lost, and the original resolution adopted.

The resolutions from the New Jersey Medical Society were then taken from the table and referred to the Committee of Conference.

Dr. Davis offered a resolution instructing the same Committee to confer with the State Medical Societies for the purpose of procuring more decisive and uniform action throughout the profession in carrying into effect the standard of preliminary education adopted by this Association at its organization in 1847. This was carried.

Dr. Gibbes, from the Committee to examine into a plan of uniform registration of Births, Marriages, and Deaths, offered the following report:

They have given the same a careful consideration, and they unanimously recommend that the report be adopted and referred to the Committee on Publication.

They also recommend that the same Committee be continued, with instructions to add to the Report in time for publication in the ensuing volume of Transactions a

form of registration law which may be likely to answer the requirements of the several States.

Dr. Sayre, of New York, offered the following:

WHEREAS, The Medical profession at large have an interest in the character and qualifications of those who are to be admitted as their associates in the profession: therefore,

Resolved, That each State Medical Society be requested to appoint annually two delegates for each college in that State, whose duty it shall be to attend the examinations of all candidates for graduation: and that the colleges be requested to permit such delegates to participate in the examination and vote on the qualifications of all such candidates.

This was, on motion, referred to the Committee of Conference.

The paper of Dr. Jones, presented at the morning session, was taken from the Committee on Publication and referred to the Committee on Prize Essays.

Dr. Eve moved to record the name of Dr. Benj. W. Dudley as a permanent member, which was adopted by a unanimous vote, the delegates all rising to their feet in token of respect.

Adjourned till to-morrow morning, at 9 o'clock.

THIRD DAY.

THURSDAY, MAY 9, 1859.

The President called the Association to order at 9 o'clock, and the reading of the minutes of yesterday was dispensed with.

The first business in order was an amendment to the Constitution, laid over from last year, and proposed by Dr. T. L. Mason, of New York, to insert in the first line of the second paragraph of Article 2, after the words "shall receive the appointment from," the words "any medical society permanently organized in accordance with the laws regulating the practice of physic and surgery in the State in which they are situated, and consisting of physicians and surgeons regularly authorized to practice their profession."

Also, to add to the sixth paragraph of the same article the words, "but each permanent member of the first class designated in this plan of organization shall be entitled to a seat in the Association on his presenting to this body a certificate of his good standing, signed by the Secretary of the Society to which he may belong at the time of each annual meeting of this body."

Dr. Lyndon A. Smith, of New Jersey, said amendments to the Constitution should be adopted with care, and though, perhaps, that now proposed might be desirable, still as Dr. Mason, who had proposed it, was not present to explain his views, he moved that the subject be laid over until next year. This suggestion was adopted.

Another constitutional amendment, proposed by Dr. Henry Hartshorne, of Pennsylvania, and laid over from last year under the rules, provides to add to the second article the words, "No one expelled from this Association shall at any time thereafter be received as a delegate or member, unless by a three-fourths vote of the members present at the meeting to which he is sent, or at which he is proposed."

This amendment was adopted.

Another amendment proposed by J. Berrien Lindsly, of Tennessee, was called up, to omit in article 2 the words, "medical colleges, hospitals, lunatic asylums, and other permanently organized medical institutions in good standing in the United States," and also to omit the words, "The faculty of every regularly constituted medical college or chartered school of medicine shall have the privilege of sending two delegates. The professional staff of every chartered or municipal hospital containing a hundred inmates or more shall have the privilege of sending two delegates, and every other permanently organized medical institution of good standing shall have the privilege of sending one delegate."

This was laid on the table until the next annual meeting.

An invitation was received from Mons. Groux, requesting the delegates to meet him at the Hall of the University at noon to-day, to witness experiments on his congenital fissure of the sternum, which was deferred until 4 o'clock this afternoon, as the Association had previously accepted the hospitality of Mr. and Mrs. Robert J. Ward at the former hour.

Dr. McDermot submitted the following resolutions:

Whereas, a vast proportion of the disease and misery that afflict our race is caused

by the excessive use of intoxicating liquors, and whereas in the opinion of this Association the evils of intoxication can be most effectually remedied by the establishment of Inebriate Asylums, wherein the victims of intemperance may be subjected to such restraints and treatment as shall effect a thorough reformation of their habits; therefore,

Resolved, That this Association recommend the establishment of Inebriate Asylums in the various States of the Union.

Resolved, That the State and County Medical Societies and all members of the medical profession be requested to unite in diffusing among the people a better knowledge and appreciation of the beneficent purposes and important benefit that would be conferred upon society by the establishment of such Asylums throughout the various sections of the country.

This resolution was referred to the mover as a special committee, with a request that he would report thereon at the next meeting of the Association.

Dr. Shattuck offered the following, which was adopted:

Resolved, That the committee appointed in May, 1857, on Criminal Abortion, be requested to continue their labors, and especially to take all measures necessary to carry into effect the resolutions reported by them on the first day of the meeting.

Dr. Yandell, from the Committee on Voluntary Essays, made a further report that a communication had been received from Dr. Langer, of Iowa, on Subcutaneous Injections as remedials, which, on motion, the author read.

The essay was referred to the writer as a special committee, with the request that he would report further at the next annual meeting of the Association and continue his investigations.

Invitations to visit the Insane Asylum and the Library and Museum of Transylvania University were received.

The President appointed as the Committee of Conference to meet the committee from the Teachers' Convention, the following gentlemen:

Drs. Blatchford, Troy, N. Y.; Condie, Philadelphia, Pa.; Bozeman, Montgomery, Ala.; Brodie, Detroit, Mich.; and Sneed, Frankfort, Ky.

Dr. D. Meredith Reese, from the Nominating Committee, made the following final report:

Special Committees continued.

On Quarantine—Drs. D. D. Clark, Pa.; Snow, R. I.; Jewell, Pa.; Fenner, La.; and Houck, Md.

On Medical Ethics—Drs. Schuck, Pa.; Murphy, O.; Linton, Mo.; Powell, Ga.; Eve, Tenn.

On Tracheotomy in Membranous Croup—Dr. A. V. Dougherty, N. J.

The Effect of the Perineal Operations for Urinary Calculi upon Procreation in the Male—Dr. J. S. White, Memphis, Tenn.

On Mercurial Fumigation in Syphilis—Dr. D. W. Yandell, Louisville, Ky.

On the Improvements in the Science and Art of Surgery, made during the last half century—Dr. Jos. McDowell, St. Louis, Mo.

On the Cause and Increase of Crime and its Mode of Punishment—Dr. W. C. Sneed, Frankfort, Ky.

On the Education of Imbecile and Idiotic Children—Dr. H. P. Ayres, Fort Wayne, Ind.

On the Uses and Abuses of the Speculum Uteri—Dr. C. H. Spillman, of Kentucky.

On the Topography of Vermont—Dr. Perkins, of Vermont.

On the Pons Varolii, etc.—Drs. S. B. Richardson, of Kentucky, and Fishback, of Indiana.

On the Physiological Effects of the Hydro Carbons—Dr. F. W. White, of Illinois.

The paper from Dr. Ellis, of Massachusetts, on the subject, "Does the Microscope enable us to make a positive diagnosis of cancer, and what, if any, are the sources of error?" Was referred to the Special Committee on the Microscope, of which Dr. Dalton is chairman.

On motion the report was adopted as a whole.

Honorary resolutions were passed to the memory of the following members of the Association, deceased:

Dr. W. W. Boling, of Alabama; Dr. Thomas D. Mutter, of Pennsylvania; Dr. P. C. Gaillard, of South Carolina; Dr. Jabez G. Goble, of New Jersey; Dr. John K. Mitchell, of Tennessee.

Dr. R. K. Smith, of Philadelphia, submitted the following:

Resolved, That the death of Dr. John K. Mitchell, one of the members of this Association, has been to this body a loss keenly felt by every man who knew him. His eminence as a teacher, his varied acquirements in every department of learning, and his generous social qualities in every relation, endeared him to every member of the profession who had the pleasure of his personal acquaintance.

Resolved, That the family be notified of the action of this Association.

Other more formal resolutions were offered and feeling eulogies pronounced.

Dr. Sayre offered the following, which were adopted by acclamation:

Resolved, That the thanks of the American Medical Association are eminently due and are hereby presented to the citizens of Louisville, Ky., for the princely hospitality publicly and privately extended to the members of this body during its present session.

Resolved, That to the Committee of Arrangments and the Profession of Louisville generally, our thanks are due for their kind and assiduous attention to the Association, and for the hearty welcome with which they have greeted our Convention in their flourishing city.

After the transaction of some other unimportant routine business,

On motion of Dr. Davis, the Association adjourned to meet at New Haven on the first Tuesday in June, 1860.

The registration book during the day announced the names of Drs. D. G. Thomas, of New York, William S. Cain, of Kentucky, and Peter Allen, R. K. McMeans, and W. R. Kable, of Ohio,—making 305 members in attendance during the session of the Association.

The Napoleonic reigns may be epochs of usurpation and tyranny to France, but they are distinguished by many features wise and commendable to all governments, seeking with honest spirit the welfare of those over whom they rule. The one of these features which suggests this remark, is the true zeal they manifest for the production of what we conceive to be two inseparable conditions, namely: the sanitary police of their communities, and the high respectability of their medical profession. If we were not fearful of offending those mighty modern Solons, who manufacture and re-manufacture laws for this much governed city, we would venture to remind them that an important lesson might be derived by observing the conduct of the government mentioned above, in reference to all questions of a medical bearing. Both the Napoleons have entrusted the medical profession with plenary powers in matters pertaining to hospitals and general sanitary policy. But mark the difference! A few weeks ago, the physicians of Louisville, with great unanimity, recommended one of their own number as a resident Superintendent of the City Hospital. The Council disregarded the petition, though respectfully framed, and notwithstanding the fact, that no charge of incompetency could with truth be brought against the gentleman whose name we supported for the office, in their wisdom they rejected him, and put in the office a non-professional person.

Thus is lost to our city and State, the best opportunity we have ever had of having a charitable institution in our midst, to which we could recommend the suffering poor, with full confidence that their wants would be intelligently and faithfully cared for; and at the same time, point it out with a feeling of pride, to medical visitors to our city, or students seeking profit from its clinical advantages.

Punishment of Adulteration in France.—The Paris Gazette de Tribunaux, of the 22d January, contains the sentences pronounced by the Correctional Tribunal, at the instance of the public prosecutor, against a large number of shopkeepers and milkmen, found guilty of adulteration. Some of these sentences are quite heavy. One milkman, who had been convicted for the fourth time on a charge of "falsifying alimentary substances," was sentenced to eight months' imprisonment, and 3,000 francs fine. He was also doomed to have six placards of the judgment posted up. The widow Bainaldy, milkwoman, for the falsification of milk by adding 30 per cent. water, was sentenced to three months' imprisonment and 50 francs fine. M. Cordier, wine merchant, 14 Rue Boutebrie, wine falsified by the addition of water, six days' imprisonment and 50 francs fine.

A Paper on the Management of the Shoulders in Examinations of the Chest, including a new Physical Sign. *Read before the New York Academy of Medicine, by* John W. Corson, M.D.

We have read this paper with great interest, and with the conviction that it will prove to be a valuable contribution to practical medicine. We regret that our space will not permit us to publish the entire article; we give however, a very satisfactory summary of its essential matter, made by the author himself, at the end of his modest little pamphlet.

The reader, who has been in the habit of examining the chest, by the several methods of palpation, inspection, percussion, and auscultation, will recognize in all of the "positions" of Dr. Corson, modes of procedures to which he has often had recourse, in a loose and irregular way, in his investigations of diseased conditions of the thoracic viscera; he will here find these procedures reduced to method, systematically arranged, and illustrated by drawings, and cases, and will feel not a little surprised that a matter so simple and obvious had never been suggested before. The author claims that his system is original, and very justly, for though others may have managed the shoulders in the several ways indicated, time and again, no one certainly has ever presented the subject didactically as Dr. Corson has. He is entitled to the honor of an original discoverer, and to the thanks of the profession.

The "management of the shoulders," is auxiliary to the investigation alike of acute and chronic diseases of the chest. Dr. Corson dwells with especial emphasis upon the aid thus afforded to the early detection of tubercles. Few subjects of diagnosis have claimed or received so much careful and minute attention as this; every symptom and sign calculated to elucidate a problem so important and so constantly recurring, have been pressed into service. Dr. Corson claims that, by a proper management of the shoulders, the signs which are supposed to indicate the very earliest depost of tubercles may be more certainly appreciated than heretofore; nearer access is thereby gained to the source of these signs, which, delicate and obscure at best, require that the several senses employed in their detection, should be as little obstructed as possible. Any one who will test Dr. Corson's method of management, will at once,

realize its great advantages; not only may the anterior regions of the chest be made more subservient to diagnosis than they have heretofore been, but the supra-spinal subdivision of the scapular region, considered by many eminent observers almost valueless so far as some of the methods of physical exploration are concerned, may be so managed as to furnish most decisive revelations. The posterior part of the apex of the lung is a favorite haunt of tubercles; pathologists inform us that this is often the first point of tubercular deposit. Every procedure therefore, calculated to facilitate our early recognition of the lesion, is desirable, and we feel very sure that Dr. Corson's fourth position of the shoulders brings this part of the lung as near as possible to the scrutiny of the senses. In our examination of the lung, we have always more highly appreciated this region than most observers, and we fully concur with Dr. Corson, in his estimate of its importance.

The fifth position of the shoulders is considered by Dr. Corson, the most important and valuable of all the others. We do not consider it so much superior, but certainly it exposes to near observation, parts of the lung, which in the natural position of the scapula, are far removed by the dense intervening structures. It is interesting to test by actual experiment, the facility thus afforded, to a nice appreciation of the physical signs developed within this portion of the chest.

We do not attach much value to the *new* physical sign of bronchitis, which Dr. Corson thinks he has discovered by the aid of the fifth position. This sign is a prolonged, loud, liquid breathing, which he ventures to call *moist respiration;* nor have we had an opportunity of confirming his statement that the murmur of mitral regurgitation is rendered slightly more distinct posteriorly, when the scapulæ are pulled or pushed out of the way, as he directs them to be in this position; we have no doubt of the accuracy of his observation, for we have been in the habit of seeking in this region for the murmurs of valvular lesion, and have thought them sometimes more distinctly audible here, than on the front of the chest.

In connection with the sixth position, Dr. Corson announces a *new physical sign* which has heretofore escaped the notice of observers. This new sign consists in diminished mobility of the entire scapula, and sometimes of its separate angles, a

diminution and stiffness of motion proportionate to the extent of disease and consequent impairment of function within, and relative to the precise locality of such abnormal conditions. We have long been familiar with similar impairment of parietal mobility, in the infra-clavicular and other regions; it is one of the most constant of the physical signs of phthisis; hence, we might have inferred a similar effect from similar causes acting upon the corresponding posterior parietes. Dr. Corson has established the correctness of such an inference, by a series of careful observations; he gives a number of cases in a tabular form, which conclusively determine the reality of the new sign. We recognize it as a valuable addition to our means of diagnosis, for though, in a large proportion of cases, other co-existing signs may suffice without this, to enable the inquirer to determine the question of disease, we can readily conceive that this single sign may occasionally be the one upon which a positive decision may hinge.

Dr. Corson gives us, towards the conclusion of his paper, some admirable paragraphs upon therapeutics of phthisis. He opens nothing especially new, but commends, in the most emphatic terms, the analeptic system of treatment now so much in vogue. He is hopeful in his general prognosis; thinks the disease often curable, and that it may be rendered more so, and that the chances for such a favorable issue may be materially enhanced by an early recognition of the disease. If by any mode of inquiry, tuberculosis of the lungs could be detected three months earlier than we can now detect it, it is impossible to say how much more successful our treatment might be. Dr. Corson is sanguine in regard to the aid which a proper "management of the shoulders" will afford to this early recognition.

We append the summary with copies of the author's illustrations by one of our own artists, and commend the entire paper most heartily to the notice of our readers: R.

SUMMARY.

1. That remembering the great value of many reputed "little things," in the science of saving life; and the chests of *lean* persons give clearest sounds, and are best marked—we may seize this hint from nature, and increase the "physical signs," by either lessening or removing more especially those principal natural obstacles, the great pectorals in front, and the two scapulæ and their muscles behind.

2. This may be affected by using the arms as levers, and the hands as hooks to pull. The process, in each case, involves three principles—*thinning*, *condensing*, and *tightening*. It is illustrated by the simple experiment of placing one forearm of a muscular man behind his back, while the other hangs loosely by his side, when the sound, especially of percussion, will be found heightened below the clavicle of the stretched side in front.

3. That the suggestions here offered are not fanciful theories, but the results of practical observation on several hundred patients in private, and in two large Dispensaries, during the past year. The drawings, too, were copied from nature. To throw back the shoulders, and bare the whole front, we need the "*first position.*" [Fig.1.] It is a repetition of the above experiment with *both* arms.. *The left wrist is simply held easily with the right hand behind the loins.* This has many little advantages in obscure cases. It gives symmetry, gets rid of the arms, and fits the coat of flesh closely, like a bandage, for "inspection," makes it tense to increase the resonance of delicate percussion, and *conducts* better the sounds within. It thus aids in distinguishing the more difficult cases of tubercles, pleurisy, pneumonia, or aneurism.

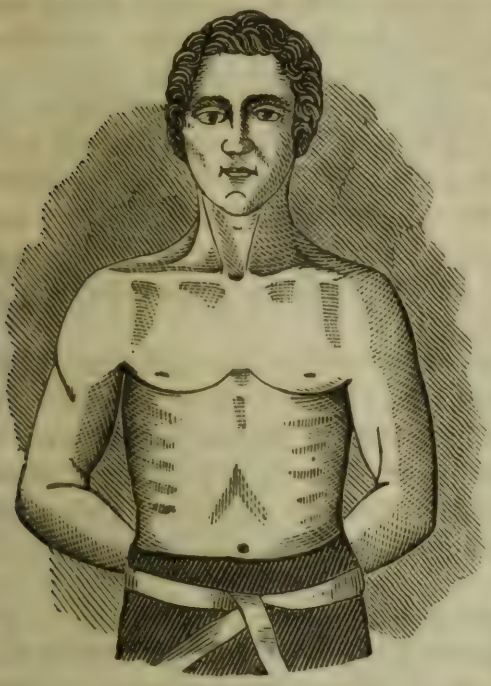


Fig. 1.

4. That the "second position" [Fig. 2] is the common one of locking the hands over the head to examine the axillæ, and is mentioned to avoid omission. the *third position*, [Fig. 3] crosses the arms at the back of the head, with the hands grasping near the elbows, so as to *hoist* the shoulder blades high up behind, and *thin* the muscles, to search for obscure or limited pleurisy or pneumonia low down near the diaphragm posteriorly.

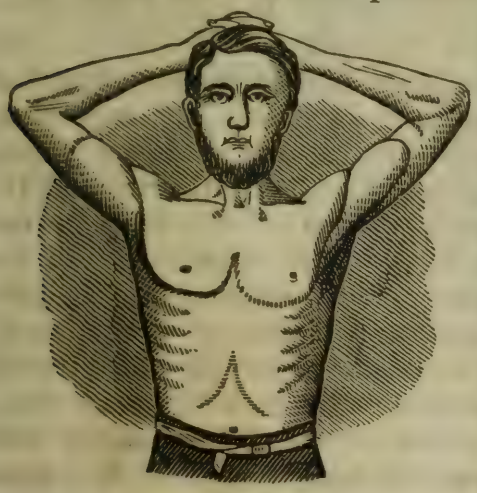


Fig 2.

5. It is very important early in suspicious cases of cough, to

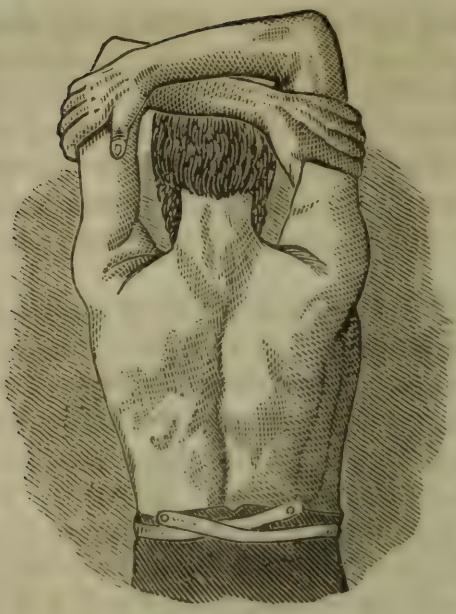


Fig. 3.

examine carefully the *tops of the lungs behind*. For without any distinct signs in front, consumption, often thus mistaken for a mere throat affection, begins here. A few scattered tubercles are apt to *burrow*, as it were, beneath the top of the shoulder. Here we need the "*fourth position*" [Fig. 4.] For this the patient crosses arms in front, slightly stooping, *hooks* the hands at the loins, or false ribs, and then stretching upward, he holds fast to increase the tension. The physician aids from behind, by pressing down firmly the shoulders. They are thus *slid off*, the muscles are smoothed down, and the ear, coming closer upon the top of the lung, hears better the sounds.

6. *As worth more than all the rest*, we commend the "*fifth position*" [Fig. 5], for by natural machinery it wrenches the shoulders forward *out of their beds*, and widely severs them in the rear. In thin persons it often thus stretches out their intervening muscles till like stout broadcloth, and thus quite uncovers the inner and upper part of the lungs behind. To accomplish this, the patient crosses his arms in front, with the stronger outside, grasps with the opposite hands the *two shoulder joints*, pulls both strongly, and holds fast, to keep them tense. The physician aids to fix the shoulder blades widely apart at the back by firmly pushing. Even in health, as any one can prove, the soft breathing murmur at the former place of the scapula can be thus nearly doubled. In tubercles it here opens a new field for *palpation*, and especially for *percussion*. It intensifies harsh respiration, or "fatty cracking." In pneumonia, it exaggerates the clear, barrel-like echo of "bronchophony," and in pleurisy that line between wind and water, the trembling "egophony." It brings out a delicate *new sign*, we have discovered, in bronchitis. It is a kind

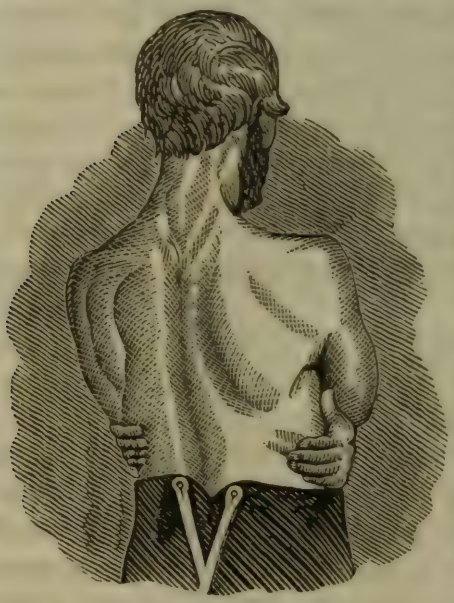


Fig. 4.

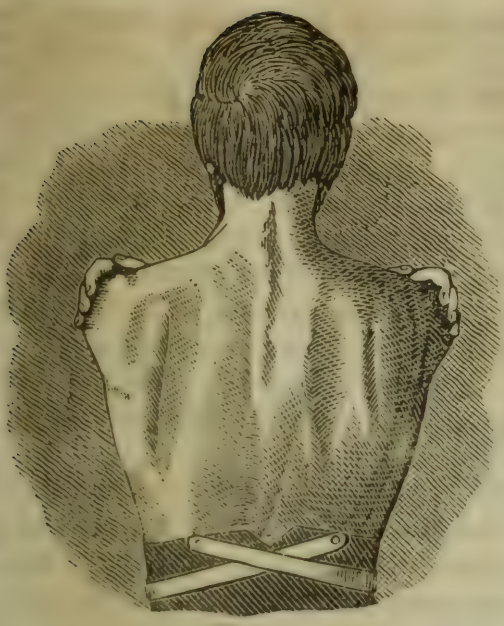


Fig. 5.

of prolonged liquid breathing, as if through a layer of wet sponge, heard before or after mucous rales, which we venture to name *moist respiration.*

7. Another new and really useful "physical sign" we have to communicate, is *the comparative stiffness of the shoulder over the lung most diseased, in strong breathing, seen and felt from behind.* For this we may use the "*sixth position.*" [Fig. 6.] Facing the back of patient, a yard distant, near a window or white wall, you tell him to drop his arms, let them hang easily by the sides, "as if dead," and then breathe deeply for a few moments, "like a man a little out of breath." You now "take aim," like a rifleman, across the tops of the shoulders, and then shut your eyes and *feel* them gently swell. Drawing nearer, you notice that the "inferior angles" of the scapulæ move gently in breathing like the fins of a fish. You can both *see* and *feel* this movement. This *stiffness* of the shoulder in breathing may be decided, or slight, local, or general. When most at the top, we term it, for convenience, "acromial," and when most at the lower extremity, or inferior angle, we call it "angular." Curiously enough, these last features seem to depend on the higher or lower location of the disease which thus, as it were, *parylyzes the parts nearest.* An elegant way of testing "angular stiffness," even in a lady fully clad, is to place your two index fingers on the lower points of her shoulder blades, and watch and feel their movement as she sighs. The causes of this stiffness are supposed to be *loss of upward expansion* in the lung, tenderness, pleuritic adhesions, and weight of morbid deposits. A table of eighteen cases is added, illustrative of this sign. It was least in recent attacks; varied most in phthisis; was slightest in pneumouia, and greatest in chronic pleurisy.

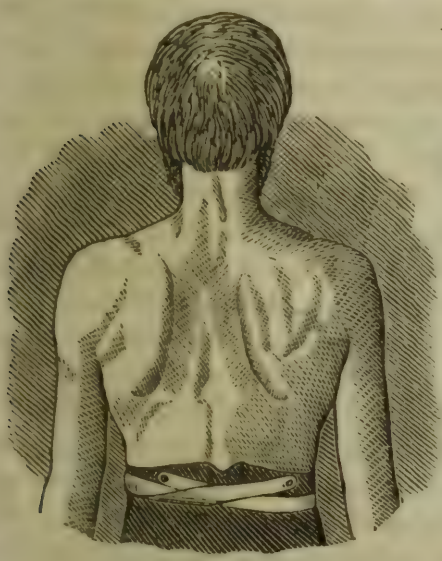


Fig. 6.

8. A statement of measurements of ten males, shows the gain in inches, and decimals, by "third," "fourth," or "fifth," positions respectively, between the inferior angles of the scapulæ, and the lowest lumbar vertebra; the "superior angles" and the vertebra prominens of the neck and between the two upper and two lower angles of the scapulæ. Of the whole of the six positions, the first, fourth, *fifth*, and sixth are the most frequently useful. The others apply to particular cases. Taking into account the pulmonary complications of other diseases as well as the range of "chest disease," it is believed these various improvements, slight as they seem in detail, really throw light, perhaps, upon many forms of *one-third of the fatal maladies of the race.*

9. On account of its fearful importance, it its hoped they will mainly benefit *tubercular consumption.* Tracing, faithfully by various "marks," and the unhealthy habits of the patient, the agencies leading to the two prevailing causes, *feeble organization* and *depraved nutrition*—by prompt reform of abuses, generous *animal food*, and free exercise in the *open air*, with tonics, and *cod-liver oil*—we may do much to arrest the disease. *Occasionally we may cure.* The encouraging researches of Hughes Bennett, and Messrs. Rogee and Boudet, show that from the numerous chalky concretions, puckerings and cicatrices found at the tops of the lungs in very aged persons, it is probable that *about one half have recovered* from more or less tubercular deposits during their lives. Four living cases from several others are reported by the writer of arrest or cure of phthisis of several years' standing. The great question of this paper then is, *what may be the result of average notice, say three months sooner?* Time can only tell. Each physician who reads this is earnestly requested to aid by a faithful trial of this system of examinations in at least *three suitable cases.* The malady is still widely and deplorably fatal. From extensive trial, we firmly believe that, simple as they may seem, this *management of the shoulders*, these expedients for *thinning, condensing*, and *tightening the fleshy walls of the chest, add fully one third to our power of detecting the earliest signs of consumption.*

We must beg those of our contributors who have sent us communications, to exercise a little forbearance. Their productions will appear soon.

Editorial Department.

AMERICAN MEDICAL ASSOCIATION.

In its social aspect, we hope that the delegates to the annual meeting of the Association just past, were fully satisfied with its results—in a scientific point of view it fell short of some of the preceding sessions. We do not mean that there has been a greater amount of scientific discussion or investigation during former periods of convocation, for we believe all of them have been quite barren in this particular; but we mean to say, that there was a decided falling off in the number of essays and reports presented, so that the volume of Transactions will, in all probability, fall short of the dimensions of any of its predecessors, though we do not doubt, from all we know of the character of the comittees who have reported, that so far as they go, the papers will possess the usual scientific interest.

The failure on the part of commitees to discharge the duties assigned them was a natural sequence upon the conduct of the Association towards its committees during the session of 1858. at that meeting, time which should have been occupied in hearing abstracts, at least, of the various reports, was taken up with the discussion of ethical questions, and some of the reports were not even called by title. So unusual does this course of procedure seem to some readers of the minutes of 1858, that a reviewer in the Buffalo Medical Journal, charges the omission to the fault of the Secretaries, and supposes it to be by a neglect of their duties, that this hiatus in the record occurs. It should not be attributed to neglect of these officers, but to the hasty manner of dispatching a portion of their scientific duties on the part of the Association, which scarcely permitted notice of some of the most elaborate and valuable essays. Such cavalier treatment does not encourage the production of reports. The laborer who serves a master without other hope of reward than a smile of approval, will not enter with enthusiasm upon new toils, if after having performed an allotted task, he does not receive even a nod of recognition. The division of the Association into sections will almost entirely remove this source of mortification to those who bring reports; they will now have ample time for the consideration and even discussion of the various papers that are brought before the Association.

We are indebted to the Nominating Committee, how much

to its energetic chairman we are unable to say, yet we attribute a moiety of this good work to his zeal and acuteness, for an important reform in the exercise of some of the duties entrusted to this committee; they will in future, not dwindle into mere channels of publicity to any and all seeking notoriety, by being paraded through the public press as committees chosen by the American Medical Association, to report upon subjects of which, as the chairman has intimated, they may be as ignorant as darkness itself. But the committee will hereafter take this matter into their own hands, and select as committees, men of acknowledged abilities, and those who will serve. The Nominating Committee should be held exclusively responsible for the character of the appointments, and should exhibit as much interest in the propriety and wisdom of their selections, as the Senators of the United States in the endorsement of appointments referred to them. This remark does not apply alone to the choice of committees, but to the selection of such names as they recommend to the prominent offices. There is no reason why the whole Nominating Committee should not have an equal voice in the selection of presiding officer, and not leave the matter, as they now do by courtesy only, to the nominating member located where the meeting is held; this individual may be personally hostile to one or another prominent member of the Association, living in the same town with himself, or he may be a man of straw, under the influence of a school, or some "Kappa Lambda" clique, or a partisan in local medical politics, often, as many of our profession will with a sense of painful humiliation bear us witness, more corrupt and infamous in trickery than State politics. We are for doing away with this precedent, which now seems to have assumed the authority of law, that no choice of president is to be had outside of the place of assemblage. It may have happened, that in all previous observances of this custom as it certainly did here, that the choice has fallen upon gentlemen in all respects eminently meritorious, but it may not always be so, and besides the disagreeability of delegates being beset by resident 'drummers, borers, and electioneerers,' immediately upon reaching the place of meeting, the practice has another strong objection in the fact that the large towns have no just claims to a monopoly of these honors, and the rule or "courtesy" as it is termed, inures to this end, and many of our most worthy compeers from inland towns are utterly excluded from this covetable honor.

We are the more free in these remarks, since the beautiful town selected as our next point of convocation, is the residence of one (it may be more than one), whose claims to this position rest upon a more substantial basis than that of mere locality.

Semi-Monthly Medical News.

VOL. I. LOUISVILLE, KY., JUNE 1, 1859. NO. 11.

A Discourse, addressed to the Kentucky State Medical Society, at its Annual Meeting in Lebanon, April 18, 1859. By JOSHUA B. FLINT, President of the Society.

GENTLEMEN:

There are times in the history of every living and progressive art which are aptly denominated transition periods, when the authority and prestige of old ideas and methods are questioned by intruding novelties, and a state of chaos or conflict occurs, out of which, if rightly treated, is developed not only a new life, but new modes of life and improvement. Such may be said to be the appointed method of human progress. Trace back the pathway that has led to any of the signal attainments of our race, and you will find it broken into stages indicative of unsteady, and often devious efforts, by which the progress has been made. Even, in the crowning achievement of scientific endeavor, the electrical current must be *broken*, before the subtile element will acknowledge and record the subserviency to which human genius has reduced it. Only the august energies of Omnipotence march steadily on, to the consummation of its great designs.

Medicine is, at present, in the midst of one of these transitions. The Hunterian epoch, in which most of us have lived, and learned and practiced our profession—though brief, as memorable and prolific as any in the history of our art—has encountered one of those inevitable vicissitudes in human thought, judgment and action, and is, in dignity and honor, passing away.* What

*Says a pert commentator on the recent obsequies in Westminster Abbey: "Strange coincidence or rather contradiction, that just when the world is forgetting his doctrines, it is striving to immortalize the man." Ah, no, my sagacious friend—at the price of spoiling an antithesis, let me tell you that the world can not forget John Hunter nor much of his teachings, and may spare itself any trouble about the immortality of either. That is already secure. In the progress of the religious developement of our race, the dispensation of Moses has been superceded; but do you think that the stern old prophet of Sinai or his Decalogue are ever to lose their hold on the moral convictions and sensibilities of mankind? I shall not be misunderstood, then, in saying that the "Hunterian epoch" is passing away.

will be its successor, and under whose leadership it will appear, is not yet determined. In the shadows, however, which coming events are said to cast in advance, the observer will not fail to discover, even now, in dim and cloudy outline, the "form and pressure" of the new era that is opening. The Neuropathic phenomena of disease are evidently in the ascendant, and destined to occupy, in the medical mind of the immediate future, the place so long and exclusively maintained by those that are vascular and inflammatory. Cor cedat Medullæ, lymph, red globules, congestion, give place to ganglia, excitability, reflex action, &c. As to the leadership and denomition of the new order of things, they absolutely defy the most enterprising anticipation. Among the medical constellations on either side of the Atlantic, there does not appear a star of empire,—not a man now on the stage of medical action, who can aspire to be such a leader as was Von Helmont, or Haller, or even Cullen, in his day. There are many *teachers* in the Neuropathic school, but never a *master*. If a tithe of the philosophic spirit of John Hunter had been vouchsafed to his busy countryman, the expositor of the mimoses, the new epoch might have appeared, marshalled under a name bearing the same initial as that of its immediate predecessor.

But, enough of the uncertainties of the future — the present is actual, whose interests, duties, and dangers appeal to practical men, in all departments of human thought and effort, with far more effect than those of the past or future. I return therefore, to the remark, that the present is *a period of revolution in the domain of medicine*, and invite you to accompany me in a few reflections upon the dangers to the cause of medical improvement and progress, which most easily beset the zealous laborer in that cause, at such periods. The duties, the active, positive duties, of every enterprise, are at all times, sufficiently obvious and inviting to those cordially engaged in it; its dangers, often involving the very essence of the cause, are more likely to be latent, and liable to be unheeded unless specially brought to view.

The danger of dangers in transition periods, lies in the tendency of the human mind to oscillate to extremes. Tired with familiar exercises and results, captivated by novelties, intoxicated by the inspirations of hope, we rush forward to positions

which sober experience proves to be untenable, and, in disheartening retreat, lose spirit and courage, as well as the actual fruits we might have secured by more patient and conservative labor. The great *problem* at such times, should be the fusion or amalgamation of the two great elements of all existence, stability and progress—the great DESIDERATUM, fidelity to our inheritances from the past, and a cordial welcome to the invitations of the future.

Let us apply these thoughts to the subject of professional reform and improvement, under the three-fold aspect of *medical doctrines*, *medical practice*, and *medical education*.

Admirably in point, as illustrative of our tendency to ultraisms in doctrinal matters, is the late and present state of medical thought in regard to the venerable controversy between solidism and humoralism.

Fifty years ago, the professional mind seemed to be settled down into exclusive and absolute solidism. It had reached this position after a contest of centuries, and was in none too good humor with an adversary that had held out so long, and whose fascinations had been so hard to withstand. We not only disowned humoralism, but scouted and ridiculed it. The philosophical determinations of Bichat and Cullen, had found lively and effective co-operators in the pasquinades of Moliere and Peter Pindar.

Presently, however, some of the interesting results of the application of chemistry to the organic fluids, tempted the pathologists of the day to employ them for the elucidation of essential fever. The results of this experiment were received with favor, and thus was re-introduced this discarded but seductive species of medical philosophy. How rapidly it has recovered its lost favoritism, I need not say, to hearers so familiar with current professional ideas as those I now address. Blood diseases, uremic affections, depraved and poisonous humors, and similar terms and expressions may be said to have become rather characteristic of modern nosological essays. As was to have been expected, along with the phraseology of the old fashioned humoralism, are returning the extravagances and absurdities of its practice. Already we have an author referring hysteria to uremic depravity, and we shall presently be for eliminating the "peccant humors," in a

severe toothache, instead of invoking the eradicating forceps of the dentist. A few of the most robust and determined solidists, like our venerable and voluminous Paine, who, by the way, is an admirable illustration of extreme opinions, in the other direction, are resisting this headlong precipitation into old and exploded errors; but the mass of the profession seem to have embarked "with a will," in the revamped argosy that is under full sail for the very "ultima thule" of humoralism.

Now, the briefest reflection is sufficient to show, independent of the positive experience of past times, how pernicious, how fatal indeed, to true and durable progress, such extreme doctrinal views of disease must be, and to suggest a caution against the dangers we are contemplating. Such sober reflection, unbiassed by sectarian or fashionable influences, will force us to the conclusion, that every constituent portion of any organized being may have its properties or capacities so perverted as to constitute primary, original disease, in the being to which it belongs; and that the philosopical solution of the question of the starting point of any train of morbid action, is to be effected, not by the application of any doctrinal test, but by analyzing the facts and phenomena of the case, and accepting with satisfaction the last results of such analysis, whether they be presented in fibre or fluid.

In proceeding to our second topic—the great and inviting field of practice—we shall at once perceive that none of the changes or revolutions that mark our period, are more conspicuous—none certainly more interesting, than that which consists in substituting cautious and expectant medication for the heroic polypharmacy that prevailed so generally fifty years since, and which is far from being among the things of the past, in this region of the world. This change has been going on of late, as the legitimate result of a more scientific pathology, an admirable exposition of which is furnished by Prof. Bennett, in his late invaluable contribution to our literature of practical medicine. But previous to these suggestions of science, it had commenced rather empyrically, as the result of certain views of the relative efficiency of nature and art, in the cure of disease, which had, from time immemorial, governed the thought and action of individual practitioners, but which, in their formal and methodical presentation, are quite modern, and have

as yet secured a very limited admission and influence in the professional mind.

It is always difficult to fix a precise date to the origin of such matters, but I believe it is conformable to facts, and just to persons, to affirm, that the views to which I refer, were first promulgated by Dr., now Sir John Forbes, some twenty-five or thirty years since, and about the same time, by a distinguished countryman of our own, Prof. Jacob Bigelow, of Boston, Mass. The exposition of Dr. F. appeared in two elaborate articles in the British and Foreign Medical Review, of which he was then editor, entitled respectively, "Homeopathy, Allopathy, and Young Physic," and "The Water-cure, or Hydropathy."

These articles encountered a storm of opposition, from those who assumed to be conservatives in the profession, as bitter and uncompromising as those that were encountered in their respective times, by Harvey and Jenner—their principles declared revolutionary and derogatory to legitimate medicine, and their author denounced as a medical heretic and a deserter from his professional ranks. Not a few of the *oracles* of our art proceeded to his excommunication, in ample form. But it is as true now, as in Testament times, that "wisdom is justified of her children." Nothing could testify more strongly to the essential truth and practical value of those views, than the steady and rapid change which took place in the professional mind regarding their character, during the subsequent years of silence of their accomplished promulgator, and the general favor with which was received from from his hands, a year or two since, a little volume, entitled "Nature and Art in Disease," in which the same reformative ideas are inculcated that had been so distasteful in the "Review."

"It is thought," says the author, in his preface to this favorite little volume, "that the general views here given, will enable such junior practitioners as may study them, to apply them of their own accord, to the improvement of the treatment of diseases, by strengthening their confidence in nature's powers, and by mitigating, in their hands, the evils of polypharmacy, and of that meddlesome and perturbative practice still so prevalent in this country."

The editor of one of those periodicals that were fiercest in

their assaults upon the "articles," thus notices the later utterance of the same truths, in the volume:

"This book gives explicit and coherent expression to that feeling of reaction against violent and purturbative practice, which has been going on in the profession for the last twenty years, and may now be considered as settled and fixed. He explodes, almost by a simple statement of it, the opinion of disease being a separate entity destructible by the introduction into the system of an appropriate remedy; and he recalls to our attention, in a truly philosophic form, the sanative powers of nature."

Prof. Bigelow was a little in advance of his British co-laborer, in point of time, but his reclamations were, at first, not quite so pointed or general. Twenty-eight years ago, on an anniversary occasion, in a sister State, precisely analagous to that which has called us together, this gentleman, in the exercise of the same function which it is my privilege to exercise now, read to the Massachusetts Medical Society his well known discourse on "Self-limited Diseases." Although this discourse was mainly devoted, as its title implies, to the exposition of the author's conservative views of the treatment of a particular class of diseases, yet there is running through it a tone of disapprobation of the prevalent style of therapeutics, and an expression of reliance upon the sanative powers of nature, which places it in the same category with the subsequent productions of his enlightened compeer and fellow-reformer on the other side of the Atlantic.

Since the period of these remarkable productions, the medical mind has been exercising itself every where, with different degrees of interest and success, in applying their principles and doctrines to the current manifestation of disease, and the methods of its treatment. Where ever this test of the new views of practice has been faithfully applied, it is wonderful how uniformly they have been sustained by the results of experience.

The dogmatic relations hitherto established between diseases and their pharmaceutical remedies, are, to a greater and greater extent, distrusted, and the "vis medicatrix" is invoked and depended on with more and more confidence and frequency. One after another of the converts thus made to the new dis-

pensation, has communicated to his fellows, in the form of lecture, occasional discourse, or more explicit report, his satisfactory experience and convictions, until it can boast, already, in this country, a considerable show of literature, devoted to the commemoration of its merits, and the diffusion of its influence.

The philosophic and genial poet of our profession, the inimitable Holmes, in a recent valedictory addressed to the medical graduates of his school, in the spirit of this beneficent amelioration of practice, charges them on the point we are contemplating, in the following epigramatic lines:

"With regard to the exhibition of drugs, as a part of your medical treatment, *the golden rule is, be* SPARING. Many remedies you give would make a well person so ill that he would send for you, at once, if he had taken one of your doses accidentally. It is not quite fair to give such things to a sick man, unless it is clear that they will do more good than the very considerable harm you know they will cause. Be very gracious especially with children."

To the same effect, but far more authoritative are the recent congratulations of Prof. Bennett, that the art has, of late years, been undergoing a great revolution — that whilst physiology and pathology have been making rapid advances, our previous impressions of the action of drugs, and of various modes of treatment have become altogether changed — vindicating the necessity of this change, moreover, by the remark, that "the prevalent therapeutics are so exceptionable that many intellectual inquirers among us take refuge in a universal skepticism as to the action of drugs, leave every thing to nature, and merely adopt what in France is called an expectant treatment, and in Germany, the practice of Nihilismus." "Nay," he adds, "it has even been contended that our remedies, so far

age such conclusions, when we assail those abuses, and endeavor to invite the professional mind to more rational, more liberal and comprehensive views of what constitutes the practice of medicine.

In the above cautionary remarks of Prof. Bennett, we have the true explanation of the "medical infidelity" so often referred to and deprecated in certan conservative quarters, as they claim to be, and which is, by the same parties, charged upon the influence of those who are the advocates of a more natural and liberal system of therapeutics. The want of faith is not in a wise and intelligent professional care of the sick—a care that employs in their behalf, all the various agencies that are known to influence favorably, the restorative efforts of nature—but in that exclusive and officious care that relies mainly upon the administration of medicines, and the introduction of special antidotes. To this class of medical infidels, the present speaker has long professed to belong, and he may add, has not been altogether without some experience of the penalties which the orthodox party, as they deem themselves, in church, state, and profession, think it fair to impose as the price of the privilege of independent thought and action. In early professional life he was led to scrutinize more rigorously than many others, the antidotal relations then taught to exist between diseases and their remedies, and which constituted a part of the medical creed of the times. Every year's persistent attention to the subject, has more and more convinced him that those relations are so imperfectly understood by the most intelligent practitioners, and so misunderstood by others, as to constitute a very uncertain and unsafe basis of practice, and are yet so authoritative as to encourage a reckless and pernicious employment of medicinal agents. Nevertheless, it is equally true that so far from undermining his medical faith, every advancing year of his professional life thus employed, has only served to deepen and strengthen his convictions of the unspeakable benefits derived to mankind from legitimate and scientific medicine.

"Vis medicatrix naturæ," is a favorite professional expression—a time hallowed portion of medical phraseology. But do we appreciate fully its actual signification in a professional sense, and do we respect it as we should, in our dealings with disease? Is there indeed, among the other wonders of our corporeal

being, a subtile force, inherent in the very organization itself, whose office it is to protect vitality, in its very arcana—to correct errors of function, and restore lesions of structure? So our accepted phraseology implies—so, in some sense our daily experience assures us, and so also, some of the most striking analogies of nature intimate.

Some hundred years ago, astronomy offered a frightful prophesy to the world from the observation of certain irregularities in the motions of the moon, which, presumed to be persistent, would inevitably, at some uncertain, but not very distant period of time, bring that planet into contact with the earth, and introduce the reign of chaos into the solar system. Our poetic brother Darwin celebrated the sublime disaster in some of his most effective lines, and Sir I. Newton went to his grave in the melancholy apprehension of this impending catastrophe, in the system whose laws he had done so much to unfold. It was left for his great compeer La Place to correct this mistake of his predecessors—to illustrate the efficiency of the "vis medicatrix," even among the stars, by demonstrating that this dreaded irregularity itself was hurrying our capricious satellite within the range of attractions and influences that would modify its erratic propensities, cause it to resume its normal course, and wheel on, indefinitely, in its appointed orbit, without hazard to the safety or harmony of the system. How reasonable then, to infer, independent of the multiplied experience to which I shall presently refer, that in the microcosm of man, the all-wise creator has introduced a like conservative principle, limited indeed, and qualified by the exigencies and necessities of a mortal and transient being.

But far more conclusive than any analogical suggestions, are the familiar facts presented to those who are observant of disease, provided they will interpret them with a view to the point we are considering—so that we have no doubt of the operation of this conservative principle in the more trifling disorders and diseases of the body, which, let alone of art, nevertheless are relieved by the restorative forces of nature; but we are too prone to distrust the ability of these forces to contend with the more serious and formidable of the disturbances of the system. Although our distrust of the good old dame does not often degenerate into the positive insult inculcated

in the conceited counsel of Dr Rush, who is said to have been in the habit of charging his pupils "to kick nature out of the door when ever they enter the room of the sick," yet when grave enough to invoke the interposition of the physician, the common thought is that diseases are to be *conquered*, *extirpated*, *jugulated*, or at least *cured* by his introduction of some antagonistic agent from without—and so we have extracted from the plant, or dug from the earth, or compounded in the labratory, our armament for this warfare and victory. Nor is this search for remedial agents in the various kingdoms of nature, to be discouraged. Medicine is under many obligations to her sister sciences for such contributions. But the physician must bear in mind, when he takes the field with this potent and specious array, that, as in all other hostile conflicts, the peaceful interests of the seat of war may be sacrificed by the desolating struggles of the belligerents, and that the disorder which provoked the contest is often inconsiderable, compared with the ravages inflicted on the battle ground.

Not without reason does that eminent physician, Chomel, among the French practitioners of his day, "facilis princeps," introduce one of the noblest contributions to practical medicine that the literature of any nation can boast, with the memorable apothegm—"the *first* care of a physician is, that he do no harm to his patients, and then to do them as much good as possible."

Not unfrequently we seem to have overcome morbid processes and tendencies by the skillful employment of the materia medica; but the result is due only to a fortunate co-operation of these agents with the "vis medicatrix." Indeed, my brethren, without indulging any transcendentalism of thought or expression, while wielding these agents against disease, we are too apt to forget that the great remedial agencies for physical ailments, like that great remedy provided for moral diseases—"the Kingdom of Heaven," are within us—those organic intuitions and autocracies that are too little studied, and too little respected by the ministers of the healing art.

True it is that, in the case of every living being, these natural conservative forces are at last powerless in the presence of the universal doom of humanity. But equally powerless, in that exigency, are all the vaunted processes of art. The angel

with the flaming sword still stands where he was placed in the infancy of our race, guarding the tree of life, lest the venturous hand of man should pluck the fruit thereof, and live forever.

Occasionally, however, in the most desperate and hopeless instances of disease or injury, when art is paralyzed by despair, or its services ineffectually urged upon an obstinate or frantic suffererer, the practitioner witnesses, with admiration or amazement—almost with awe, as if it were the work of some supernatural interposition, a spontaneous restoration to health, which he dares not claim as a cure, but would rather, in all humility and gratitude, denominate a resurrection. Who knows but such gratifying surprises would be more frequent, if it were not so much the custom, in the popular reliance on drugs, to medicate the more heroically, as the case becomes more desperate—"melius anceps quam nullam remedium"—and sometimes, without doubt, to extinguish the feeble remnant of vitality, which, peradventure, might have borne up under the stress of disease, but could not endure the additional trial of perturbating medication.

Nothing preternatural is there in those wonderful recoveries; but only illustrations of the recuperative potency of natural laws, so striking, and sometimes so affecting, as to force themselves upon our recognition; but in a variety of facts and observations of a less extraordinary kind, are the existence and operation of these laws demonstrated, with equal conclusiveness, to the observing and thoughtful physician. Recoveries from grave diseases among barbarous people—restoration of persons desperately wounded at sea, or otherwise out of the reach of professional aid—the acknowledgment on all hands that some of the most frequent forms of grave deseases, typhoid fever for instance, and the exanthemata, are not amenable to any known medication, and which nevertheless afford a gratifying preponderance of recoveries—the facts attending the practice of homeopathy—the actual facts I mean, and the honest practice of that infatuation, and not the pretension and cheatery which generally make it infamous as well as absurd—all such matters of fact and observation—common, patent, every where encountered, some of them—among their ligitimate impressions upon the physician's mind, should above all things, convince

him that the professional care of the sick, a wise exercise of the healing art, demands something more and higher than the antidotal administration of calomel and tartar, iodine, or even the hyperphosphates.

Highly confirmatory of such impressions, as it seems to me, is the argument from an interesting narrative relating to a novel form of medication recently introduced in some of the South-Western States, furnished by a gentleman for many years an extensive practitioner in that region, but at present a resident of Louisville. He had just returned from a visit to his old sphere of medical duty, and to the professional gentlemen who had been his associates, or had become his successors there. The most experienced and eminent of those gentlemen were in a state of enthusiastic excitement over the discovery of a new remedy, which appeared to be of a very general and salutary application—a remedy, at once simple and potent, pleasant to the palate, obtained without cost, and administered without risk. "Cooke and Rush are alike exploded," says the pleasant narrator, "and it looks like the whole materia-medica was to be superseded by *Cornshuck-tea*."—*Decoctum Zeae Mays, Glumarum.*

Many details of the new practice were given, derived from conversations with gentlemen who had adopted it themselves, or who represented the views and conclusions of others who had, and there appears to be a very sincere and earnest conviction among them, that they can manage the diseases of that region, better by the exclusive use of this novel ptisan, than by the hitherto accredited medication—a class of diseases, we must remember, that has been regarded as demanding, more imperatively than most others, the somewhat heroic administration of certain energetic medicinal agents.

Now, although our information on this little revolution is too limited to justify any conclusion as to its merits or permanence, it is quite safe to affirm that whatever merit it may be proved to possess, consists not so much in the administration of "*cornshuck tea*," as in the abstinence from the old-fashioned routine of antidotal medication, thus allowing a fair chance to those spontaneous or natural therapeutics of which we have been speaking.

Let it not be said now, in opposition to these views or statements, or to any legitimate inferences from them, as it once was

said to Dr. Forbes, that to entertain and inculcate them is professional suicide—that, if Nature be thus adequate to the exigencies of disease, there is no longer need of physicians—that the healing art is then an insignificant title, and the venerable institution that has borne it so long and honorably, a pretender. In acknowledging Nature, as all will agree to do, to be the real parent and producer of the various flowers and fruits of the field, do we disparage the art of agriculture, or forego the services of the husbandman, or undervalue the science which enables him so to regulate the productive forces of nature as to develope wholesome nutriment from a noxious plant, and to cause "the wilderness to rejoice and blossom like the rose?" "Man is but the minister and interpreter of of Nature," says Lord Bacon. If the physician would most truly magnify his office, let him exercise it as the deferential aid, the obedient handmaiden of nature. Consummate must be the art, or the degree of art, which can co-operate with this great life-giving, and life-preserving power—subtile and profound indeed, the science, that can know how to aid its benificent agencies of restoration. Let medical art prepare herself for this elevated and elevating companionship of service, not by any slavish subserviency of purpose, not by divesting herself of the implements of usefulness she has inherited or won, not by depreciating the value of her own proper share in the results of the united endeavor; but, leaving to modern Paracelsists the pursuit of new remedies, let her address herself with new zeal to the investigation of the *natural history of disease*, to the study of the temperaments and idiocracies of her patients, to the sanatory applications of that famous category of the "*non naturals*," which secured so much of the regards of the old physicians, *meat and drink, sleeping and watching, motion and rest, the retentions and excretions, and the affections of the mind.*

Attention to these topics, far more than has of late been bestowed, is necessary to develope the functions of the physician, in their true and harmonious proportions. He must *cure* the sick, not according to the vulgar sense and application of the term, but according to its true and etymological meaning, as it was originally employed in medical phraseology. *Cura*, the Latin substantive, implies care, not physic, and the verb

curare, to take care, to conduct safely, not to medicate. So of the corresponding Greek term—*Therapeuo*—it signifies, "I wait upon, I alleviate, I attend upon the sick," and not, I employ the materia medica, I prescribe jalap or quinine or calomel or opium—the judicious use of such agents constituting only a part, and by no means an essential part, of the true physician's duty. In what form of disease is professional attention to the sick more eminently conducive to a favorable result than in that grave and dreaded malady, Typhoid fever, and yet, how inconsiderable a part of that attention, if wisely given, consists in the administration of drugs? Behold the victim of inexorable Phthisis, now bled to dissolution by the disciples of Gallop and Rush, now debilitated by equally unwise confinement and nauseating expectorants, now tormented by blisters and issues, now drugged and nauseated by the fashionable hypophosphates, now suffocated and put in mortal peril by the hazardous cauterizations of Green; and now, again, behold him, the fortunate patient perhaps of my namesake at Buffalo, refreshed by cordial drinks and invigorating food, mounting his horse on the plains of Nebraska, and bravely combatting his disease—peradventure conquering it—by means not incompatible with the enjoyment of life or the discharge of some of its most urgent and grateful engagements. In such a presence who will heed the flippant cavil, "no physic, no physician?"

There is no Nihilismus in such instances, no quasi Homoepathy, not even the French Expectantism: but the most positive, rational and legitimate application of medical science to the treatment of the gravest forms of disease. Such instances, moreover, would be more numerous than they are, if our knowledge of diseases was only more intimate and complete than it is. Whenever we shall have become as thoroughly acquainted with rheumatism and dysentery, as we now are with typhoid and phthisis, we shall be able to dispense with most of the empyrical or dogmatic medication which we now employ with such uncertain effect in those affections, and substitute a regimenal or hygienic method of treatment, far more certain in its beneficial effects, and realizing in their attainment, if no other incidental advantage, two at least of the three ancient desiderata in medicinal action—"*tuto, ac jucunde.*"

No substitute for study then, as already hinted, no dispensa-

tion in favor of indolence or routineism, no "royal road" to professional success, is tempting us into the new school of rational practice. Only new acquisitions of knowledge, making us better acquainted with the natural history of the various diseases, can enable us to extend the range of this practice, and emancipate ourselves and our art, from the thraldom of a prescriptive materia medica, and to become physicians indeed, instead of quasi apothecaries.

Did it never occur to you, my friends, in regard to the supposed efficacy of certain drugs in the cure of diseases, how very unsatisfactory any estimate of such efficacy must be in view of the notorious adulteration and impurity of a large portion of the articles most relied upon in practice? Fortunately, at the present time, through the enterprise of a distinguished scientific member of the profession, in our midst, we can here obtain medicines that are absolutely reliable; but, during the last fifty years, throughout the western country at least, I presume it will be safe to say that not one quarter part of the most valued medicinal agents employed by the physicians, approximated the qualities and potency assigned to them in the dispensatory. The boasted exploits of our medicinal "Samson," become doubly apocryphal, when we consider that every grain of most of the calomel used, with such wonderful effect upon the liver and other secretory apparatus, consists principally of chalk, or some equally inert and more ponderous white powder. If such facts explain the harmlessness of the immense doses of this drug, that have sometimes been administered, they are equally conclusive as to the uncertainty of its usefulness, when administered with posological propriety in a multitude of instances, as well as suggestive of the question whether the results of cases would have been any more adverse if the interposition of this *shorn* Samson had never entered into their treatment at all.

What, then, it may be inquired, is the doctrine and purpose of the new school of practice, in regard to the administration of drugs? Do we proclaim a crusade against the approved materia medica, renounce all the means it supplies for the modification of diseased action, and counsel physicians as well as patients, in the language of the great dramatist, to "throw physic to the dogs?" By no means. That were an ultraism

almost as reprehensible as the most reckless polypharmacy. Almost, I say, for it is my settled conviction that the fatality and duration of disease, on the whole, would be far less under a total abstinence from all pharmaceutical agencies than under such a meddlesome and heroic employment of drugs as finds its justification in standard works, and orthodox teachings, and honored examples of the last half century. But, abuses of things are never good reasons for the entire disuse of them.

In avoiding the mischiefs of polypharmacy, let us not forego the advantages of a discriminating and prudent medication. We cannot yet give up, without loss, even that family of medicines whose abuse has been more flagrant and disastrous than that of any other—mercurials; and if compelled to relinquish *the Opiates*, for one, I would throw up my diploma, and make my professional conge, at the same time.

No, indeed—the skillful climber holds fast to the present support until he has made sure of his grasp upon the round above, and we, if we would come out of the present transition period of medical practice, at a point above that of our entrance or actual position, must act upon the argument of our discourse, resist the tendency to extreme views, and, taking a maxim from a book of the highest authority, "prove all things, and hold fast that which is good."

We are less likely to err in the sparing administration of drugs, on account of the popular idea of their necessity in all serious illness. There is a faith in physic, prevalent in society, quite irrespective of, nay, decidedly antagonistic to a rational confidence in medical science. Long ago, when doctors illustrated the learning of their calling, by intercommunications in Latin, a sagacious veteran in its ranks thus qualified the scientific ardor of an inexperienced young friend, whose studious efforts deserved a more cheering recognition. "O Juvenis tua doctrina non promittet opes—plebs amat remedia: 'The people love nostrums, they don't want your learning, they want your physic.'" Many a disgusting dose, whose best commendation is harmlessness, has found its way into a sick man's stomach, for no better reason than a deference to the perverse partially implied in the old gentleman's satirical, but too well founded, expostulation. The honor of the profession, not less than the efficacy of our art, demands that we disabuse the

popular mind of this pharmaceutical credulity—this strange and unnatural appetite for nauseous drugs. Bigelow has assailed it as Cervantes did another infatuation, in his "Paradise of Doctors"—but all of us may contribute, in a more direct and rational manner, to the same end, by so conducting our practice as to demonstrate that we do not participate in that credulity ourselves, nor surrender our judgement to it, when presenting itself in the well-known expectations, or even importunities of infatuated patrons.

The caution against extreme opinions and measures, which was intended to be the central idea of the present discourse, but which, like the text of many a better sermon, has been eclipsed by the intrusion of incidental thoughts and illustrations, is not less pertinent in regard to our efforts for the improvement of medical education, than in the topics already contemplated.

Those efforts constitute the engrossing medical movement of the day—felt to be so essential even to medical respectability, to say nothing of dignity and progress, that the professional mind is hardly calm and dispassionate enough to fix the blame of existing evils where it truly belongs, nor to appreciate justly the various expedients that are suggested for their removal. Moses, in no part of the admirable economy of his dispensation, showed a clearer insight into human nature, than in the institution of a "scape-goat" that should bear off occasionally, into the wilderness, the sins of the people. No individual or community, of any kind, political, theological, or medical, ever suffers itself to fall into besetting sins either of omission or commission, but, so soon as retribution begins to be felt, looks around for a 'scape-goat'—and so we have turned upon the Medical Colleges, and fixed upon them the blame and discredit involved in the imperfect education of our young physicians.

But, it may be fairly asked, if unsuitable persons have found their way into the fraternity, where were they initiated but in the offices of private practitioners, and who sent them to the schools, generally speaking, if not these same gentlemen who have better means of knowing their fitness or want of capacity than the professors of the schools? Far from blameless, however, are the colleges themselves, in this particular, inasmuch,

as it is their duty to throw out unsuitable material, instead of trying to manufacture it into indifferent products.

What shall be done with these institutions, and how shall it be done, in order to render their graduates more worthy of our professional fellowship? Let me venture to add another to the various responses to these interesting questions.

Considering that the present system of organizing and conducting our *Medical schools*, is something like an hundred years old, it is remarkable how little change judicious criticism of it is now disposed to suggest. Almost all other institutions, in this progressive age and nation, have outgrown their mode of being and action in half that time.

In the matter of organization, it seems to me that the capacity of our schools for furnishing instruction up to the times, would be increased, by the addition of two or three more chairs to the corps of teachers — clinical medicine and surgery, should each have an independent professorship, and public and private Hygiene with perhaps legal medicine, another. This would make the number of distinct departments of instruction ten instead of seven, and the fee of each profession should be so reduced, as to make the aggregate tuition the same as at present. Beside rendering the curriculum more complete, this would secure the incidental advantage of dividing the receipts, in prosperous schools, so as to offer fewer temptations to *star lecturing*, as it may be termed. Few circumstances have exercised such unfavorable influences upon the character and usefulness of our medical schools as the policy, too common among them, of inviting to vacant chairs a class of men who have educated themselves expressly for lecturers, devoted themselves to teaching as a means of livelihood, and circulated about the country, from place to place, sojourning, for the time being, wherever they could make the most profitable engagement. The effect of this policy has been, in the first place, to render the mercenary element in the economy of these institutions, more predominant than it would otherwise have been; in the second place, to induce frequent changes in their Faculties, and in the third and most important particular, to commit the most practical departments of instruction, often, to men who were attractive rhetoricians and plausible dogmatists, but destitute, by reason of the very vagrant habits of their life, of

that personal acquaintance with disease, and familiarity with its treatment, which are indispensable qualifications in one who is to prepare young men for the duties and responsibilities of physicians. No man should occupy any chair in a medical school, with the exception, perhaps, of chemistry, who is not, or has not, for many years of his life, been in active practice. Learning, scholarship, eloquence are indeed most excellent and desirable accessory qualities, but cannot confer the most essential qualifications for a medical teacher, any more than they could confer upon one of us the seamanship of a Hull or a Decatur. Young men cannot be duly initiated into medicine by mere dilettanti in the art, much less can they be made to realize the full inspiration of the arduous and noble calling, except from the lips and example of a veteran in the service.

Professorships should be regarded as *places of promotion and honor* for eminent practitioners, and not as *livings* for medical pedagogues, nor as *spoils* for the astute professional electioneerer and intriguant. In no department of duty is the "laborer more worthy of his hire," than that of training up worthy successors in the healing art; but it is a gross and sordid perversion of a noble purpose, to pander to the spirit of avarice or even of pecuniary adventure, by extravagant emoluments offered to medical teachers. To say nothing of pecuniary accumulations, which some fortunate professors have realized, it is unreasonable to look to the compensation for four hour's labor per week, through the four winter months, for the entire means of subsistence during the year of otherwise unproductive and perhaps fashionable living. Let the medical professor, like his professional neighbors and friends, depend for his livelihood and official independence, upon the legitimate rewards of practice, and let him receive for his services at the college, rather as a *honorarium* than a hire, a reasonable compensation for the time and labor there expended; but let him not desecrate his official position by lending or giving it to the service of mammon. Let him not, I say; but can we candidly speak of this matter, my friends, as altogether future and contingent? Has it not already come to pass, that our medical schools, in the majority of cases, and in a form and degree which cannot be charged upon other educational institutions, have become money-making, or, at least, money seeeking establishments?

and is it not to this fact that we must trace, in the last analysis of causes, most of those irregularities and abuses, so detrimental to the profession, which we have been so many years trying in vain to correct, and which we may try forever, in vain, to correct by any such superficial reforms as consist in proposed changes in the curriculum, in the length of the lecture term, &c., &c.

Whence the intense and ungenerous competitions, whence the various allurements to students of questionable taste and propriety, whence the electioneering circulars, whence the boastful and fictitious catalogues, and whence the almost undisguised difference between the ostensible and actual terms and conditions of graduation, which characterize our medical school policy? Enthusiasm in the noble ends and attributes of medical scholarship, might well inspire efforts and expedients, various and earnest, on the part of those charged with the direction of it; but not such efforts and expedients as these. Too plainly do they betray their origin in that ignoble affection which inspiration declares to be "the root of all evil."

To protect the offices of medical instruction from mercenaries, as well as dependents, we should discountenance the great augmentation of classes, which the gregarious propensities of students, and the allurements of fashion and prestige, rather than any well founded preference, occasion from time to time, at one place and another. One hundred and fifty or two hundred bona-fide students, with the tuition fees at present in vogue, will furnish an ample renumeration for the services of the professors, rendered according to our standard curricula, and no one will doubt that this number can be better instructed by the same corps of teachers, than four or five hundred. No impartial and well-informed physician will doubt, I suppose, that the *eleven* or *twelve hundred* students gathered the last winter, at Philadelphia, would have been better instructed, on the whole, under an equal division among the four respectable schools of that city, than under the unequal division that actually occurred — nobody believing, except some of their green students or excusably partial alumni, that the Faculty of the Jefferson College, able and eminent as it is, is capable of supplying young men with what they have to learn in medical schools, any better than the Faculty of their neighbors of the

University, or the Faculty of the College of Physicians and Surgeons of New York, or the Faculty of the University at Nashville, or the Faculty of the University of Louisville.

The *organization* of our medical schools, as already said, needs but little change to bring it into correspondence with the advanced and diversified scientific requisitions of the day, and it may be added, that the terms and conditions of graduation, as they appear in the circulars of all the reputable schools, are equally satisfactory, and sufficient to secure a respectable medical education in their graduates, if rigidly and faithfully enforced.

Three years preceding the age of manhood, are to be devoted to medical study, under the direction of a respectable practitioner — attendance on two courses of lectures of four months each — evidence of having practiced dissections, and attended clinics — the exhibition of a well-written thesis, and a satisfactory examination in all the departments of medical science — these requisitions hold the standard of qualification for the doctorate as high as the general state of mental culture and of opportunities for preliminary study throughout the country, will bear, and the young man who is made to comply with them, in good faith and reality, will generally be fairly entitled to the honors of graduation.

It is in the *administration* of the schools, then, and not in their organization or requirements, that we must counsel and enforce reform that shall be of any efficacy; and, if the board of representatives of the Colleges that is soon to assemble, to recommend measures of reform, contents itself with advising a prolonged period of study, an extension of the lecture term, and better preliminary education, it may as well never have troubled itself with a session at all, so far as any real improvement is to be effected by it, in medical education. Something more radical, penetrating, corrective, must be applied to the abuses of the system — the *administration* of it must be brought up to its actual *provisions*, and then, and not before, can we know whether its provisions are wise and adequate or not. But how, and by whom is this correction to be devised and applied? In this question lies the whole difficulty of the subject. "Quis custodiet ipsos custodes?" Who shall watch the watchmen? The reply to the question, in this form, in the

present application of it, is ready enough, as it seems to me supplied, indeed, by our general acquiescence in the measures now in progress for effecting reforms and improvement in medical education. The "American Medical Association" has called together the board of advisers referred to, and is to review and legislate upon its conclusions. The Profession is the patron of the schools, and may always control legislative enactments conferring the privilege of introducing new members into its body. It is proper therefore, and in analogy with legal maxims, in other cases, that it should have the right of superintendence and visitation. The Association, with its 4,000 or 5,000 permanent members—representative men, from all quarters of the country—is already a *power* in the commonwealth of medicine, and, if it maintain itself, as hitherto, with a simple organization, unswerving devotion to the original purposes of its being, proof against the temptations of centralization, the blandishments of partialities, and the snares of intrigue, just alike in the dispensation of its honors and its retributions, will soon become a *sovereign* and *absolute power* there. If this body can bring the medical schools, under such a system of inspection, as is employed in the management of other classes of educational institutions, by means of trustees, committees, and similar agencies—such an inspection as will open the real policy, economy and conduct of each institution, to the cognizance of the medical public, it will have taken the most important step towards an improvement in medical education, avoiding all violent and impracticable alterations in a favorite system, while preparing the way for the most uncompromising reform in the administration of it.

This "Association"—the great representative body of American Medicine, is soon to assemble, in the principal city of our own commonwealth. I deem it the duty, and doubt not that it will be the pleasure of this society, to take some measures indicative of its grateful recognition of so distinguished and welcome a visitor. In its aunual migrations to the different States, the parent Association is naturally the guest of its nearest relative and principal constituent, the State Society. Let us be true to our filial relations on the approaching occasion.

Our brethren of the city are already in the field of preparation, and we must be content to assist them in the dispensation

of appropriate hospitalities; but we ought not to be anticipated by any body, in cordial assurances of dutiful regard, and cheerful co-operation, addressed in suitable form and terms, to our only superior in the family of corporate medicine.

The present exercise, gentlemen, is among the last, and, to myself, the most interesting of the duties belonging to the office your partiality assigned to me, at our last annual meeting. I can not be insensible to the privilege it has secured me, in this opportunity of addressing on such topics, and in such terms as I might choose, an assembly like this of my professional fellows and friends, nor to the corresponding obligation to render the discourse appropriate and satisfactory to such an audience. The will and endeavor to this effect, so far as leisure and health would permit, have been mine; but no one can be more sensible of the inadequacy of the performance. Aware how little has been presented to reward your protracted attention, I still indulge the hope that there has been nothing to provoke your disapprobation or censure.

The thoughts and observations constituting the discourse, have been offered in the spirit of a devoted attachment to the profession of my choice and my pride, and of a sincere interest in this organized body of my compeers. If, as I doubt not, they are received in a kindred spirit to that in which they are offered, the hour will not have passed without its satisfactions—the genial and generous sentiment of the occasion will forego criticism on the President's "valedictory," in the more grateful endeavor to exalt its humble merits into argument or incentive, in behalf of a more general and hearty devotion to that good cause which has gathered us together in this pleasant re-union.

The Value of an Eye.—In the Rochdale County Court last week, a boy, named Edmund Hordern, of Milnrow, was sued by another boy for injuries to his eye, produced by Hordern putting lime into it on a Sunday in June last. The boys were coming from school and began to throw lime about. Hordern, it was alleged, stroked his hand filled with lime over the plaintiff's eyes, and the result has been that the eye was injured for life. The defendant's father consented to a verdict for £1, 6s. 6d.—*Edinburgh Medical Journal, January*, 1859.

OBSERVATIONS ON PUERPERAL DISEASES IN THE CHARITY HOSPITAL OF BERLIN, BY R. VIRCHOW. *Translated for the Medical News, by* S. BRANDEIS, M.D.

During the period intervening from the fall of 1856 to the spring of 1858, eighty-two cases of puerperal fever were subjected to post mortem examination. Although it is not difficult to show that these cases occurred in groups, yet no distinct limits can be assigned to any one epidemic, since sporadic cases were continually under observation during the space of time indicated above. The greatest mortality was during the cold seasons; November alone, offered twenty fatal cases. Virchow believes the more frequent occurrence of puerperal fever during the winter, to be attributable to the careful closure of the doors and windows in order to exclude cold—this lack of free ventilation leads to the production of intenser fomites. Epidemic tendencies were generally followed by material changes in the morbid appearances. The acme of an epidemic was always characterized by appearance of peritonitis.

The disease was in most of the cases, limited to the abdominal cavity, presented no metastases, and when considered in reference to the character of the exudation, admitted of division into two distinct varieties; the first was purely a superficial peritonitis, depositing its product on the surface of the peritoneum, either as plastic lymph or purulent exudation. The second more malignant form presented the character of diphtheria, depositing its products upon the subjacent cellular tissue which became likewise involved in the destructive process, and presented a mixture of detritus and pus. These morbid appearances were found most often upon the inner surface of the uterus, particularly at the point of placental attachment. The parenchyma of the uterus itself, was in only one case the seat of gangrenous destruction.

Inflammations of the ovary were more frequently observed, presenting two varieties, either as superficial hyperemia with the formation of an abscess in one or several follicles which by rupturing terminated in peritonitis, or as diffused inflammation of the parenchyma, which finally led to enlargement and softening of the organ.

At other times inflammation of the veins predominated, on which occasions metastases were never absent, inflammations of

the lymphatics which at the latest periods were particularly frequent, never resulted in metastasis, a circumstance which can only be explained by the fact that lymphatic vessels are generally passing through glands where there is such an arrest of morbific material in the circulation that inflammation of the gland may result, but never vascular thrombosis.

Such changes as those just mentioned, are generally connected with lacerations of the perineum or the mechanical injuries of the vagina and cervix uteri, and are most frequently complicated with gangrenous destruction of the cellular tissue in the small pelvis and iliac fossa.

Virchow reports a case of retro-peritoneal phlegmon which he has seen in Wurzburg, of such astonishing extent that there was a cavity formed reaching from the genital parts up to the diaphragm, into which a strong man's arm could be easily introduced. A large number of cases presented unusual results upon autopsy, of which Virchow mentions the most interesting. One of the most striking of these phenomena was the frequent occurrence of recent endocarditis. The observation of this lesion furnished an important explanation of symptoms noted during the progress of the cases.

Inflammation of the interior of the heart led to disease of mitral valves, detached particles of which were carried away by the current of circulation, and became in several places sources of obstruction of the capillaries, and in that manner becoming foci of local inflammations, such as were formerly taken for pyemic metastases. Virchow adduces the following case for the illustration of this view:

A woman 34 years old, who had given birth to six children, was delivered of her seventh child on November 7, 1857. Though apparently doing well for the first two days, she was seized on the third day by a severe rigor, which afterwards recurred several times. While the abdomen remained soft and painless, inflammation developed itself in the varices of the thighs; pulse 120, irregular and intermittent. On the ninth day another rigor, after which the right eye became lachrymose and sore. On the eleventh day the parotids became affected. On the 12th day the left eye was similarly affected. Delirium and death on the fourteenth day.

Post-Mortem.—The genital organs perfectly normal; the

varicose veins of the thighs were filled with coagula, which were seats of local inflammations, not extending however to the abdominal cavity. Upon examining the heart, the mitral valves were found softened and ulcerated. By exuberant growth of its texture, the valve acquires first a swollen gelatinous appearance, becomes opaque, rough, and fragile, and finally lacerates, the current of blood separates some of those minute detached particles, causing its ulcerated appearance. Starting from this inflammatory lesion metastases are found in various remote points produced by obstruction of small arteries. Every one of these inflammatory faci was characterized by the circumstance that it was penetrated by an artery, obstructed at the point of inflammation by a minute fragment of the softened valve.

Although in parts remote from the heart, Virchow believes himself able to demonstrate the origin of these metastases by chemical tests. Fibrinous coagula moistened with a solution of caustic potash becomes transparent and partially dissolves, while these particles obstructing the arteries at points of metastasis, as well as the degenerated cardiac valves, remain unchanged. Inflammatory faci like those described, were found in the texture of the heart, kidneys, spleen, liver, and on the retina and choroids of both eyes. The same process exhibited itself in the abdominal cavity with the remarkable circumstance that the peritonitis was limited to the superior part of the abdomen, while the uterus and its appendages were exempt from the metastasis. A large abscess was found perforating the capsule of the spleen which was believed to be the starting point of the peritonitis.

From the result of this autopsy, Virchow concludes that the phenomena of puerperal fever, whenever the uterus is found in a healthy condition, originate from disease of the heart. This case in connection with four similar ones, and particularly one whose sudden death was connected with extensive softening of the heart, determined Virchow to pronounce those cardiac affections to be of a puerperal nature, and to recommend strongly a close examination of the heart wherever metastases are forming, in lying-in women, and where the abdominal organs do not appear sufficiently diseased to account for the high degree of general illness, or the great rapidity of the pulse.

Popular Remedies of Russia. *Translated from the Russian Medical Gazette, by* W. N. Hailman.

Three years ago, an engineer from the mines of Altai, began to suffer with stricture of the urethra, in consequence of hemorrhoidal congestion. He was compelled to return to the mines without being able to use the remedies proposed by his medical adviser. The bad roads, cold weather, and want of convenient opportunities for the attention of natural calls, at the stations, gave rise to an orchitis which forced him to stop a day at Tiemen, in order to apply leeches about the anus. He arrived a few days afterwards, at Barnaoul, suffering the most painful ischury. The introduction of the catheter gave excessive pain along the prostatic portion of the urethra, and the therapeutical means, such as Belladonna ointment, leeches to the infra-abdominal region and anus, etc., brought no relief. His sufferings increased daily, when the heps (the fruit of the wild dog rose) was proposed by some sympathizing by-standers, and without consulting his physician, a handful was immediately browned, ground, and prepared like coffe, and the patient drank one glassful; half an hour afterwards he passed three pounds of thick turbid urine. I arrived at the moment relief had been obtained, he ascribed his recovery to the heps, altogether denying the efficacy of the other remedies he had used. The patient soon recovered and has since enjoyed good health.

I determined afterwards to test the value of this remedy in a case of strangury resulting from rheumatic cystitis, and it proved effective, I tried it also in blennorrhœa, in which it showed diuretic properties but failed to cure. It has likewise proved useful in suppression of urine, in fevers accompanied with pain in the renal region,; lastly I cured with it two cases of recent ascites. The white dog rose grows abundantly on the mountains of the Altai, and the fruit contains much tannin, and is popularly used in the form of infusion or decoction in diarrhœa. For the same purpose they use a decoction of the pimpinella saxifraga; garlic is also a favorite remedy in this class of affections.

Among the officinal plants abundant here, aconitum deserves particular mention. It is gathered during and after flowering, dried and preserved as a remedy for colds. The following is

the manner in which it is used: When one feels, from the ordinary indications, that he is "taking cold," he puts of this herb *ad libitum* on a piece of bread, lays down on the warm oven, eats his medicated bread, and covers himself with furs, this is followed by a profuse perspiration and recovery. We will not be astonished at the excessive dose, when we reflect that many persons here accustom themselves to mineral poisons to such a degree that they drink large quantities of corrosive sublimate with brandy, or take it upon bread with apparent pleasure. But they always seek when using such remedies, a very warm place in order to encourage perspiration. In popular veterinary medicine, aconitum also plays an important part.

Pneumatosis intestinalis is treated in the villages, with dried ant eggs, which have a carminative influence so undoubted, or so strongly imaginary that this agent is often taken for amusement, and its hyper-action restrained with alum.

The wood and bark of the Juniperus Sabina, are used as anthelmintics in infusion or decoction.

From the Kirghize Steppe, dried apricots are imported into Siberia, and are useful in chest complaints, probably on account of their sugar. The remedy is popularly prepared as follows: The kernels are separated from the pulp, and with the rind crushed in a mortar, the mass is placed together with the pulp into an earthen jar. New *quas* is then poured over it, and the jar closed up with dough, and allowed to sit all night in a warm oven. With this preparation consumption is said to be cured; but among the people, every chronic chest disease is termed consumption. Nevertheless it has proved serviceable in pulmonary catarrhs and hemoptysis. In similar affections, infusions of ceratonia siliqua, of rye-flour, &c., are also used.

Frequently also, the following remedy is used in these affections: In the spring, sprigs of the Larix Libirica are bound in bundles, then macerated in steam, and while in the hot vapor bath, the patient places them over his chest and face, and inhales their resinous odor.

The blood of a dog used as a bath while yet warm, is regarded as a good restorative of frozen limbs.

Among the many remedies for epilepsy beds of partridge feathers are much resorted to; though it would be difficult to explain the modus operandi of this remedy, it is highly praised.

A. REX,

Chief Physician to the Mines of Smjejinogorsk, in Siberia.

Editorial Department.

Editors Medical News:

Gentlemen—I have been prostrated by sickness, and still finding the state of my health precarious, I think it advisable to suspend the publication of the "Louisville Medical Gazette." This notice is due to the editors of the various journals, who have been so kind as to exchange with me, and to whom I now offer my most sincere acknowledgments for such kindness.

Respectfully, L. J. FRAZEE.

Louisville, May 28, 1859.

We regret the ill health of our friend as indicated by the above notice, and if he will allow us to testify our appreciation of his worth by continuing his name on our exchange list, we shall with pleasure do so.

Before another number of our Journal is issued, we expect our Junior Editor to be again at his post, from whence important business has for a time called him. While making this announcement, we hope we shall be excused for assuring the friends of the University and those students who desire to profit by his ability as a teacher, that Dr. Benson has never entertained the slightest intention of severing his connection with the University. We do not wish to trouble our readers with refutations of the numerous misrepresentations continually set afloat, with regard to the Faculty of this School; but in this instance the absence of our colleague has served to give a plausibility to the statement which might endow it with longer life and more extensive circulation than most of the currency of that description with which our community is repeatedly flooded.

Publications Received since our Last.—From Messrs. Wood, of New York, the British and Foreign Medico-Chirurgical Review for April 1859, filled with valuable matter, as this

Journal always is. The first and second numbers of the Medical Weekly, published by V. N. Taliaferro and A. G. Thomas, at Atlanta, Georgia. It is an attempt to popularize sound medical doctrines, and to combat quackery through a medium which will be within the reach of the non-professional. The enterprise deserves the highest commendation and encouragement.

Pharmaceutical Department.

By T. E. JENKINS, Pharmaceutist.

FALK'S "TINCTURA ANTACRIDA."

From the well known action of volatile oils and substances of a similar nature upon the salts of the noble metals, and the violent reactions which result on mixing oxide of silver with creosote, vegetable bases and other easily combustible substances as was described in the 15th of March number of this journal, we are led to venture an opinion as to the cause or causes which are at work in bringing about the serious change which takes place in the chemical constitution of the Tinctura Antacrida.

As stated above, this preparation is a very antiquated one, and one which has been doomed to desuetude more than once; we hope, in the sequel, to show the probable cause of the cessation of its use as well perhaps, as to point to its final destiny. The formula by Dr. Fenner as published in the New Orleans Medical Journal, and copied into several other Medical and Pharmaceutical periodicals, is as follows:

℞ — Guiaci Resinæ,	- - - -	
Balsami Canadensis, (aa)	- -	℥iv.
Olei Sassafras,	- - - -	℥i.
Hydrargy: Chlor: Corros,	- -	gr. lxxx.
Alchoholis,	- - - -	℥xxxii.

Mix the corrosive sublimate with one half of the alcohol, and the other ingredients with the the remainder of the alco-

hol, allow them to macerate with frequent agitation for ten days, then mix the two alcoholic solutions and filter. Dose, 10 to 20 drops thrice daily.

The resulting tincture is a beautiful transparent deeply red colored fluid, but on standing, will soon give evidence of alteration in constitution by the deposition of an unmistakable and suspicious sediment. In order to be perfectly satisfied that there could be no mistake in the compounding of the mixture, several specimens both from our own shelves, and from those of other stores were compared, and found to present the same appearances.

Dr. J. T. Plummer, of Richmond, Indiana, has called the attention of the medical profession to the instability of this preparation, in a communication to the Cincinnati Lancet and Observer for January 1859, in which he says: "It will be found that, however valuable the preparation may be, it will gradually alter its properties, so as ultimately to consist of little else than a limpid (colorless?) solution of the poisonous constituent, all the organic portions having gone to the bottom of the vessel."

That the preparation alters its properties, there can be no doubt; but the manner or nature of the alteration is not correctly accounted for by Dr. P. We have satisfied ourselves of this by direct experiment, for we poured off the clear tincture from the *white* sediment which lined the sides and bottom of the bottle, washed it well with alcohol, and with water, to remove all the soluble constituents of the tincture, collected the sediment, and on analysis found it to be mild chloride of mercury and nothing else. The tincture had not altered in its appearance from the day it was made, but was transparent and of a deep red color; the organic constituents had contributed nothing to the sediment, but all remained in solution. The solution had become acid which was manifest to test paper.

This clearly shows that the change which the preparation undergoes, results in a reduction of the corrosive chloride of mercury to a lower state of combination, i. e. to calomel, decomposition of a portion of the water which gives rise to the free hydrochloric acid and the oxidotion of a portion of the organic constituents. The final result will be ultimately to *free* the mixture from its poisonous constituent.

The play of chemical affinities takes place, in our opinion, between the corrosive chloride and the volatile oils which are present, and we find a parallel in the mixture of corrosive sublimate with comp'd syrup of sarsaparilla, U. S. P., in which the volatile oils are doubtless the agents in the reduction of the corrosive to the mild chloride of mercury.

This preparation will surely and finally be abandoned unless a competent remedy be applied to prevent this radical change of medicinal properties in it. This we think no hard matter to do, and would suggest the same one which is recommended by M. LePage, for the preservation of the mercurial constituent in the comp'd syrup of sarsaparilla and corrosive sublimate mixture, which would consist in adding an equivalent proportion of iodohydrargyrate of potassium to the tincture instead of the corrosive sublimate.—(*Vid U. S. Dispensatory, eleventh edition, page* 1282.)

We found on analysis of tincture which had stood on our shelves for six months at an average temperature of 65° Fahr., that it had lost 1⅛ grains of corrosive sublimate from every fluid ounce; the original quantity as will be seen from the above formula, is two grains per fluid ounce. We find also, that an increase of temperature hastens the precipitation very much.

We would then call attention in general terms to the fact which appears to be clearly manifest, that the highly oxygenated combinations of the metals, especially the heavy and noble metals, those whose higher combinations are capable of easy reduction either to a lower grade of oxydation or to the metalic state, e. g., copper, lead, mercury, silver, gold, should only be mixed with easily oxydizable bodies such as organic bases, volatile oils, resinous and spirituous proximate principles, after due care and consideration have been exercised, and then recommended to the profession after the test of time and experience has proved their stability and value.

The discretion to be used in making the above mixture, is especially necessary, from the fact that some very combustible organic bodies reduce such metalic compounds even to the metalic state, while others have a tendency to bring about oxydation to its greatest extent; for example, when common resin is employed to facilitate the extinguishment of mercury in making "hydrargy cum creta," the mercury is often found peroxydized, and is liable, especially when the preparation is exposed to the light, to become oxydized to such an extent as to make it a dangerous remedy; similar results may be produced when *oxonifying* organic substances are associated in metalic combinations.

Semi-Monthly Medical News.

VOL. I. LOUISVILLE, KY., JUNE 15, 1859. NO. 12.

TRIAL OF DR. H. P. MARQUAM, *of Darlington, Montgomery County, Indiana, who was indicted by the Grand Jury of said County, in March,* 1855, *for the murder of* VIOLET COOK, *and for manslaughter, in producing the death of the fœtus with which she was pregnant at the time of her death;* Hon. E. A. HANNEGAN, Attorney General J. E. MCDONALD, *and* MR. SAMUEL WILCOX, *were the Attorneys for the defence.* Mr. HANNEGAN *was subsequently succeeded by the* Hon. DAN. VOORHEES, U. S. District Attorney for Indiana. Judge ISAAC NAYLOR *and* Hon. JAMES WILSON *for the prosecution.*

At the commencement of the trial, the Hon. Wm. Bryant Presiding Judge, Dr. Marquam took a change of venue from Crawfordsville to Rockville, Park County, Indiana. The first indictment was quashed; a new one was found, which was sustained by the Court, and a change of venue taken again by Dr. Marquam, to Covington, Fountain County, Indiana.

The trial was put off from Court to Court, on account of absent witnesses. At the only Court where all the material witnesses on both sides were present, the case was postponed on an affidavit of the defendant similar to the one hereto appended. It will be well to state, that neither of the absent witnesses by whom he expected to prove that the deceased, Violet Cook, died of disease, and not of poison, had ever seen the case before death; did not witness the post-mortem examination; and knew nothing of the analysis of the stomach or its contents. It is also proper to state, that the attorneys for the prosecution after having made every effort to bring the case to trial without success, and having every reason to believe that postponements would still be had on similar affidavits, determined to bring the case to trial by admitting the affidavit, which was

done by Judge Naylor, and the Prosecuting Attorney, in the absence of the Hon. Jas. Wilson.

On making the admission appended to the affidavit, Judge Naylor stated, that admitting that Drs. Brown and May would testify that they believed that Violet Cook died of disease and not of poison, was not admitting the *fact* that she did die of disease; that a medical opinion was not a fact. The intimation was, to admit the reading of their opinions as presented in the affidavit to go before the jury as evidence, and that other evidence of physicians and chemists would be presented as rebutting testimony, of which the jury would be left to judge.

But Judge Cowan, the Presiding Judge, ruled that in admitting the affidavit, the prosecution had admitted the fact, that Violet Cook died of diseased lungs, and not from the effects of poison, and that no rebutting testimony could be presented. This decision of the Court, excluded the testimony of Drs. Fry and McMechan, who made the post-mortem examination, and also the testimony of Dr. Fry, and Professor E. O. Hovey, of Wabash College, who made an analysis of the stomach, and also the testimony of Thos. E. Jenkins, who had made a very thorough analysis of the stomach and its contents, and had detected a large quantity of strychnine.

Judge Cowan stated explicitly, that his decision was strictly in accordance with the decisions of the Supreme Court of Indiana.

It will be seen, that Dr. Marquam was cleared by his own affidavit. The Court instructed the jury to bring in a verdict in accordance with the facts contained in the affidavit.

The State of Indiana,	Indictment in the Fountain Circuit Court, February Term, 1859.
vs.	
Henry P. Marquam.	

Henry P. Marquam being duly sworn, on his oath says, that he cannot safely go into the trial of this cause at the present term of this Court, on account of the absence of Drs. Rayland T. Brown, and Willis May, the first of whom resides in the city of Indianapolis, and the latter in the town of Crawfordsville, Indiana; that the said May has been duly subpœnaed to attend the present term of this Court, as affiant believes, from the

Sheriff's return; that a subpœna was duly issued to the Sheriff of Marion County, Indiana, on the 21st day of February 1859, as deponent is informed and believes, and sent to said Sheriff, by mail on the same day; that deponent expects to prove by said witnesses, that they attended the preliminary examination of this case, before the Justice of the Peace, and that the deponent by them from such testimony will prove that the cause of the death of the said Violet Cook, was the diseased state of her lungs, accompanied with malarious symptoms; that her symptoms from the testimony, were not those of the effects of strychnia or any other poison, but of sudden and acute inflammation of the lungs; that sufficient cause for death was found in the system of said Violet Cook to account for her death without the aid of strychnia or any other poison; and he expects their statement will be that said Violet Cook died of disease, and not from the effects of poison in any form; that said witnesses are competent; that he knows of no other witnesses by whom he can prove the same facts so fully; that he believes such statements to be true as he has stated he can prove by them; that he believes he can procure the attendance of said witnesses at the next term of this Court; that this affidavit is not made for delay merely, but the furtherance of justice.

H. P. MARQUAM.

Subscribed and sworn to in open Court, March 2, 1859.

E. C. WILCOX, Clerk.

Upon which affidavit the following admission is made, to wit:

The State of Indiana, by her attorney, Robert W. Harrison, admits all the facts alleged in the above affidavit to be true, and that the said affidavit may be read as evidence to the jury.

ROBERT W. HARRISON,
Prosecuting Attorney.

STATE OF INDIANA, FOUNTAIN COUNTY, ss:

I, Elias C. Wilcox, Clerk of the Circuit Court of said County, hereby certify that the foregoing is a full and true copy of the affidavit filed and sworn to, and of the admission indorsed thereon by the Prosecuting Attorney, in the foregoing entitled cause, as the same remains on file in my office.

In witness whereof, I hereto subscribe and affix the
[LS.] seal of said Court, at Covington, this 29th day of March, A. D., 1859.

E. C. WILCOX, Clerk.

Statement of Mrs. Jane Cook, Mother of Violet Cook, dec'd.

I have been acquainted with Dr. Henry P. Marquam about fifteen years. He was our family physician about eleven years. He paid attention to my deceased daughter, as a suitor, something more than a year. They became engaged to be married, and Dr. Marquam asked my consent about three weeks before my daughter died. I took him to task for his prolonged attentions, and told him it would excite remarks injurious to the girl, and that if his intentions were honorable, they must marry by the 15th of March next ensuing. He replied, that, before he would be the cause of bringing reproach upon any of my family, after we had supported him for so long, he would suffer his head cut off, and his arm severed from his body, and agreed to marry on the 15th of March, as proposed.

Some time during the winter preceding, my daughter looked pale and unwell, yet she was doing her work as usual. Dr. Marquam volunteered a prescription, saying that she had taken a deep cold. I told him he was a physician and ought to know; and when my son was over at town, he sent a vial of drops to Violet, and one to Miss Rice, who he said, had also taken a deep cold. He told him to be extremely careful and not mix the vials, and give Violet's to Miss Rice, for the life of him. She took the drops, but they did not have the effect he desired; so sometime after, when I was in town, he came to me on the street, and handed me another bottle of medicine, strongly scented with cinnamon, and directed that she should take it; she did so. It seemed to do no good, and he brought her a large powder, which he said was calomel and jalap, saying that her liver was deranged. I gave the powder according to directions, at bedtime. Some twenty minutes after she had swallowed it she became violently sick, declaring the medicine would kill her, that she was choking to death. I put her in a warm bath, when she commenced vomiting violently, and continued to do so till next evening. On the next Sunday evening he came, and said the calomel and jalap had done her no good, and he would leave her some calomel in broken doses, as it was necessary that the liver should be aroused; so he left her sixteen brownish looking powders. This was some six weeks before her death. She took the powders; still, no good resulting, he subsequently left seventeen more, of a dove color;

of these, she took all but one, which got misplaced; and on Sunday evening week previous to her death, he came and learning that one had not been taken, he exhibited some anxiety to learn its whereabouts. It was not found however till after her death. He now put out three more powders, one to be taken that evening, which he himself administered, another on the next Wednesday, and the last on Friday following; there was no perceptible effect until after she had taken the third powder on Friday night; about half an hour after she had taken it, she called to me that she was dying, or going into a spasm; I jumped to her, and sought to raise her up, but could not do it, she said she was too stiff. I immediately sent for the Doctor, and meantime we worked with her, bathing her with camphor, and using such other domestic remedies as were at hand, she begging us not to stir or touch her all the time, lest she should be thrown into more spasms; she commenced vomiting and became some easier before the Doctor arrived. He said he would give her nothing till her stomach became settled, which occurred after midnight; he then commenced giving her, he said, broken doses of calomel, and continued giving them till about 11 o'clock on Saturday; he then left, ordering oil, stating he would not be back till next morning; before going, he left another prescription; he however came back in the evening, and stayed all night. She seemed to improve till Tuesday morning, when she became quite hungry. On Monday morning, however, he made a prescription, when she told him her mouth was getting sore, and if he salivated her she would never forgive him. He told her he would not salivate her for any thing, as she had the prettiest teeth he ever saw; so he changed the prescription, saying it contained calomel; he left others to be given through Monday and Monday night, and a large powder, which he said was to break the congestive chill, which he said she was suffering with, and it was to be administered on Tuesday morning at eight o'clock; the Doctor was to have been present at the hour, but failed to come. The big powder was given at 8 o'clock Tuesday morning, and as soon almost as she had swallowed it, she said she was going to be deathly sick, and have them spasms again; and within half an hour the spasm was upon her; we sent for the Doctor, and the messenger met him coming; I think she

had forty spasms, with intermissions of not more than half a minute; she gradually grew easier until midnight; I then thought she grew worse (we had been giving her powders through the night); I called the Doctor, who had lain down after midnight, but he did not think she was any worse. About 8 o'clock on Wednesday morning, he called for my bottle of morphine, saying he had none with him, and he was going to give her a powder of camphor and morphine to steady her nerves; he put out a large powder and gave it to her himself; she asked what it was; he told her it was camphor and morphine; she answered, "it did'nt taste like it." She had been having spasms since daylight, and this last powder was given during an intermission; she died horribly in the next spasm, and became rigid and stiff as the breath left her body.

She was buried on Thursday, her wedding day, in her wedding clothes, with her heart's best affections clinging to the Doctor, and her last look bent upon him.

JANE COOK.

Subscribed and sworn to, this 14th day of March, 1859.

ALEXANDER HOOVER, Justice. [LS.]

Statement of Mrs. Ellen Rice, taken April 4, 1859.

I have known Dr. Henry P. Marquam about fourteen years; I lived adjoining the Cook farm at the time of Violet Cook's death; on the night that Violet took the first spasm, near nine o'clock, they sent for me; one messenger said Violet was dying, the other said she was dead; I hastened over, and thought she would not get through, but she did The Doctor came and gave her a tablespoon about two thirds full of a reddish yellow looking stuff, and she grew gradually easier, after she had vomited; the spasms were of a different kind from any I had ever seen before; she would'nt allow us to touch her excepting to hold her hands or the bedstead or bed clothes; she was perfectly sensible all the time; she would stiffen with a jerk and tremble with the force; she requested the standers-by to tell Dr. Marquam (while he was absent on the second day) that she wanted to be buried in her wedding clothes, and for him never to marry any other woman; they sent for me the day she died; she was in spasms when I got there; the Doctor was there; the spasms gradually grew worse, till about 8 or 9

o'clock, when a violent spasm stiffened her backwards, raising her on her head and heels; when it relaxed, she bent forwards a little, a gush of blood came from her mouth and nose, and she was dead. After she died, Dr. Marquam spoke to me and said her mother had said she thought her bowels were swelled, so he went and made an examination under the covering. I was present at the examination of her body by Drs. Fry and McMechan; when the brain was examined some one asked what its appearance indicated. Dr. McMechan answered that it denoted poison.

her
ELLEN ⋈ RICE.
mark.

Subscribed and sworn to this 4th day of April, 1859.
ALEXANDER HOOVER, Justice. [LS.]

Statement of William G. Harland.

Have known Dr. Henry P. Marquam about fourteen years. After Violet Cook's death, and he had heard that a post-mortem had been made by Drs. Fry and McMechan, he came to my house about 4 o'clock, P. M., took me to one side, and asked me how much money I had (I had borrowed money of him); I told him; he asked me if I could let him have some, as they were about to get him into a scrape over the creek, and he wanted it to defend himself; I let him have fifty dollars; I met him at his office a few minutes after, and he asked if I could let him have the balance due; I told him yes, and gave him the other fifty; he asked me if I did'nt want his mare, that he was going away, and there was corn and hay in his stable, and for me to take her and keep her as my own. He said he thought Dr. McMechan treated him ungentlemanly in not inviting him to the examination. I asked him if they were trying to make out a case of abortion. He said they were, but that there was nothing of that kind the matter with her, and he said he was going to Crawfordsville that night after dark, to see what discoveries were made. I saw him no more till after he was arrested.

W. G. HARLAND.

Subscribed and sworn to this 4th day of April, 1859.
ALEXANDER HOOVER, J. P. [LS.]

Statement of Dr. R. A. Williamson, taken April 4, 1859.

Have known Dr. Henry P. Marquam about five years, intimately about two years. Sometime during the summer previous to the death of Violet Cook, he told me he was having illicit intercourse with her whenever he pleased. At the time of this conversation he was a little suspicious she was enciente. The subject of abortion was broached, when I remarked that I would not for the State of Indiana, produce abortion, as it was both morally and legally murder. He said he would, to get out of a scrape of this kind.

The above communication was made voluntarily to me by Dr. Marquam, and his confidence was not solicited by me in any manner.

R. A. WILLIAMSON.

Subscribed and sworn to this 4th day of April, 1859.

ALEXANDER HOOVER, J. P. [LS.]

Post-Mortem examination of the body of Violet Cook, twenty-seven hours after death; made on the 15*th day of March*, 1859.

The body was very rigid; the hands and feet more rigid and curved than usual; the face and neck rather purplish, as if the arterial blood had been suddenly arrested when just entering the capillary vessels; there was no emaciation, on the contrary the cellular tissue was excessive; the limbs full and round; the mammae large and fully developed; the omentum healthy; the spleen somewhat congested and enlarged; a portion of the mesentery much discolored with bile; the gall bladder distended with bile; the liver healthy; the external coats of the stomach in a state of high inflammation; internally, the pyloric orifice and the mucous coat of the lower half very much inflamed; the upper bowels healthy but somewhat discolored with bile rather darker than natural, did not participate in the inflammatory action of the stomach; the lower bowels healthy; the bladder healthy; the right ovary and the right broad ligament somewhat inflamed; the left ovary healthy, having a small cicatrix on its body; the uterus contained a fœtus about four months advanced, rather livid in appearance (a girl); the right lung natural and healthy, excepting a small portion on the outer surface, in close proximity with an inflamed portion of the pleura; slight adhesions of the pleura to

the sides of the chest; the left being almost perfectly engorged, bordering on hepatization; the left cavity of the chest exhibited high inflammatory action; but little in the right side; the heart natural; the auricles and ventricles almost entirely empty; the right ventricle contained a little bloody froth, the right a small quantity of coagulum; the dura mater comparatively healthy; the arachnoid engorged; the pia mater exhibited traces of inflammatory action; the surface of the brain somewhat engorged; the substance of the brain natural; the ventricles slightly inflamed.

THOS. W. FRY,
J. G. McMECHAN.

Testimony of Thos. W. Fry, M.D.

I have been a practicing physician for near twenty years; made a post-mortem examination of the body of Violet Cook, with the assistance of Dr. Jas. G. McMechan; heard the testimony of those who attended the deceased in her last sickness; the convulsions were of a peculiar character, unlike any I have ever witnessed; they corresponded with those produced by strychnia; I have never seen a case of tetanus, it is a disease of rare occurrence; traumatic tetanus is far more common than idiopathic; very few cases of idiopathic tetanus have been reported in American Medical Journals; the distinctive characteristics of tetanus from a disease or injury, and strychnic tetanus, are very striking and easily observed; trismus, or what is commonly termed locked jaw, is invariably the first symptom of tetanus; it is not the first symptom in convulsion from the effects of strychnia. In tetanus proper, the symptoms are generally mild at first and gradually become more violent, they are almost invariably continuous in their duration; on the contrary, the symptoms accompanying strychnic tetanus are of short duration; if the dose is not large enough to produce death immediately, renewed paroxysms will occur; the contraction of the muscles of the neck and back, appear in the early stages of strychnic tetanus, in the later stages of traumatic tetanus; the stiffened and clawed condition of the fingers and feet, which commenced before and continued for some time after death, is a marked symptom of the effects of strychnia, but is not of tetanus proper; the difficulty experienced in swallowing is common to both.

The symptoms of Violet Cook, as described by Mrs. Cook, her mother, and other witnesses, produced the impression on my mind that she died from the effects of strychnia. The detection of strychnia in the stomach and its contents, by Thos. E. Jenkins, removed all doubt and settled the conviction that she died of strychnia and not of disease; the sudden scream, the fear that a touch would excite the convulsions, the difficulty in swallowing, the contractions of the muscles of the back and neck (amounting to opisthotonos), the curved and stiffened condition of the hands and feet, and the exceeding rigidity of the muscles, both before and after death, clearly indicate the effects of a poisonous dose of strychnine. The diseased condition of the lungs, pleura, and the chest generally, would probably have terminated in death, sooner or later. What effect the strychnine may have had in producing that condition of things, I do not know. Cases of poisoning by strychnine are reported, in which severe engorgement of the lungs was produced. The engorgement of the lung, and the inflammation and adhesion of the pleura, could not have been of long standing, from the fact that there had been no pain, nor cough, nor emaciation, nor any physical symptom of the existence of so violent a disease. The detection of strychnine in the contents of the stomach, by chemical analysis, has been a disputed point among chemists; but the weight of authority is now decidedly in favor of the powers of chemistry to detect it in the tissues of the body after it has been absorbed from the stomach. The best chemists of the world affirm their ability to detect it in the smallest possible appreciable quantity, even to the twentieth or fifty-thousandth of a grain (1-50000). Did not examine the spinal column in the case of Violet Cook, from the fact that the condition of the spinal column and its membranes are not invariably the same in cases of poisoning by strychnia. Granulations and marks of inflammation are sometimes detected both in strychnic tetanus and tetanus proper; in other cases no morbid appearances are observed—hence the uncertainty of the evidence afforded by the condition of the spine. It is better, however, to make the examination, as it may, in some cases, give additional corroborative evidence, but none of a positive character. The symptoms before death, the circumstances of the death, the condition of the body or the

muscles of the body after death, and the chemical analysis, should constitute the principal points of evidence in cases of poisoning by strychnine. One of the powders left by the attending physician, Dr. Marquam, proved to be ergot; the administration of this medicine would probably account for the similarity of the convulsion to the ordinary labor, as spoken of by Mrs. Rice.

THOS. W. FRY, M.D.

Subscribed and sworn to before John Pursell, a Justice of the Peace of Montgomery County, and State of Indiana, April 28, 1857.

JOHN PURSELL, J. P.

Testimony of Dr. James G. McMechan, in the Marquam trial. Witness for the Defendant.

I assisted in the post-mortem examination, and concur in the above report; heard the testimony of other witnesses, together with the statement of Thos. E. Jenkins, the chemist who made the analysis of the stomach and its contents.

The convulsions of which Violet Cook died, as related by the attending nurses, were doubtless produced by strychnia, modified, in some degree, by the peculiar condition in which she was found. The amount of strychnia, as detected by the chemist, could not have been given for medical purposes; never saw convulsions of that character produced by natural labor; never saw such convulsions from inflamed or congested lungs; do not believe that any morbid appearance presented by the post-mortem examination would produce such convulsions; think it doubtful if the case would have recovered even if strychnia had not been given; the strychnia hastened the death beyond all doubt; the convulsions were evidently those of strychnic tetanus, and not those of traumatic tetanus.

JAMES G. McMECHAN.

Thomas E. Jenkins' Testimony.

I reside in the city of Louisville, Kentucky; am a practical chemist, and carry on an apothecary store; have been studying and practicing chemistry for about seven years; have made many chemical experiments both with poisons and substances not regarded as poisons.

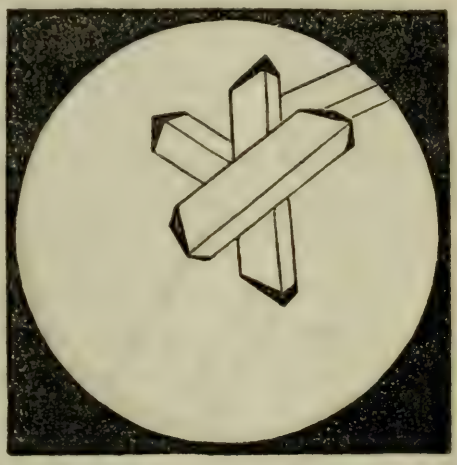
The circumstances attending the last illness of Violet Cook, were related to me by the physicians who made the post-mortem examination, and I subsequently heard the testimony of persons present at her death.

Dr. Thomas W. Fry, on the 8th of September, 1855, brought and left with me for chemical examination, what he said was the stomach and a portion of its contents, of Miss Violet Cook, of Montgomery County, Indiana, deceased; a powder was also left with me, said to be one of a number intended as medicine for Miss Cook. The bottles containing these were corked and sealed.

The fluid contents of the stomach and bowels were in separate bottles; the reaction of one was acid, the other alkaline; the fluid having alkaline reaction, contained a crystalline deposite of phosphate of magnesia and ammonia. The stomach was in alcohol. The contents of the stomach was the portion first examined, and experiments to detect an organic alkaline I instituted after the method of Prof. Stas of Brussels, which is substantially as follows:

I took about one-half the contents of the vial containing the undiluted fluid from the stomach, which measured three-fourths of a fluid ounce, and added thereto twice its bulk of alcohol and a few grains of tartaric acid; introduced the mixture into a flask and heated it to 170° Fahr.; an abundant coagulation ensued; allowed it to get cool and filtered, and washed the filter; evaporated the filtered liquid nearly to dryness in vacuo; on examining the residue a few crystals were found deposited, which proved to be tartaric acid; the coloring matter not being sufficiently removed, the residue was alternately extracted with alcohol and water a few times, and the last extraction, which was with as small a quantity of water as possible, was filtered into a small test tube, and the filter washed with a few drops of water. To the watery solution in the tube I added about four times its bulk of ether and then bicarbonate of soda until effervescence ceased, agitated the mixture well, and set it aside to settle; decanted the clear ethereal liquid from the surface into a watch glass, and allowed it to evaporate spontaneously in a quiet place, free from dust; the residue was examined for an alkaloidal principle, but too much coloring and extractive matter still adhered to it to allow a

crystalizable principle to separate in its particular shape, or a liquid one to be distinguished with certainty. In order to further purify the matter, I added a few drops of water, feebly acidulated with sulphuric acid, to the contents of the watch glass, and dissolved all that was soluble in the menstruum. The fluid was decanted into a test tube, and the washings added thereto. This was partially reduced in a vacuum (because the bulk of the fluid was too great to manage in the tube I employed), and ether and bicarbonate of soda were added as before, and the mixture well shaken and set aside to separate. The ethereal liquid was decanted into a watch glass, and allowed to evaporate as in the first instance. The residue was almost entirely free from coloring matter, and what remained was interspersed with small patches and clusters of crystals, which, on the application of test papers, gave an alkaline reaction. They possessed an intensely bitter taste, and under the microscope presented the appearance of colorless, four-sided prismatic crystals, with pyramidal summits, the crystals more or less irregular—a few, however, were very perfect; in some the sides of the pyramid corresponded with the sides of the prism; in others the sides of pyramid with the edges of the prism. Their angles were not measured.



These crystals were subjected to Laforte's, Davy's, and Marchand's color tests, and gave clear and distinct evidence of strychnia.

I examined the residue of the analysis just detailed, for its mineral constituents, but found no trace of a metallic poison.

The alcohol in which the stomach was preserved was nearly all poured off for examination, and a little more than one half of the substance of that organ was cut into small pieces and saturated thoroughly with fresh alcohol; after macerating for several hours, with frequent kneadings, the fluid was separated by means of a powerful press. This process was repeated, and these alcoholic solutions were mixed with that first poured off the stomach; after acidifying it with a little tartaric acid (in order to convert any alkaloidal matter that might be present

into a salt soluble in water), the mixed alcoholic liquid was transferred to a flask and boiled, filtered when perfectly cool, and evaporated to one-third its original bulk at a temperature of 120° Fahr., and finally carried nearly to dryness in a vacuum over sulphuric acid. A considerable amount of fat was deposited, which was separated by pouring the fluid on a small filter, moistened with water. The filter and the fatty matter in it were well washed with a fine jet of water. This filtrate was evaporated to a very small bulk on a gentle water bath, and transferred to a test tube; added to it four times its bulk of ether, and neutralized with bicarbonate of soda as in the first analysis. After agitation and settling, the ethereal solution was poured off into a capsule, and the residue in the tube washed with fresh ether, which was added to that in the capsule. This was allowed to evaporate spontaneously during the night, when in the morning there remained a slight oily residuum, interspersed with little clusters of crystals; these restored the blue color to reddened litmus, and possessed an intensely bitter taste, were soluble in ether and alcohol, but not in water, or only to the extent to impart a bitter taste, for nothing perceptible was left on evaporating the water, to whose solvent action it had been exposed. The shape of the crystals was identical with those already mentioned (one very perfect and distinct one is here figured), and they responded as strychnia when questioned by the color tests. The color test, in connection with strychnia analysis, is a term employed to designate certain characteristic colorations produced when strychnia is oxydized by sulphuric acid and bichromate of potassa, or by sulphuric acid and red prussiate of potassa, or by sulphuric acid and binoxide of manganese, or peroxide of lead and nitric acid, or by chromic acid alone, or by electricity. These agents, when properly applied, produce a play of most magnificent colors, running from deep blue through purple, crimson, red, orange, to yellow, when strychnia is present; but when that poison is absent, no other sub-

stance is known to produce such colorations under similar circumstances.*

I converted a small amount of this crystalline substance extracted from the stomach and contents, into salts, by combining it with sulphuric, hydrochloric, nitric, and other acids, and at the same time combined some known strychnia with another portion of the same acids, and compared the resulting crystals of each operation together. They were identical in appearance. In the case of the nitrate, there was a faint rose color produced with both specimens. This I attributed to the presence of brucia.

A very small amount of the crystals from the capsule was saturated with sulphuric acid and diluted with one half ounce of water, and a lively young frog just taken from the pond was put into the solution, leaving his head and upper extremities out, at half past two o'clock, P. M. In twenty minutes symptoms of tetanus came on, and in three quarters of an hour the frog was violently convulsed with tetanic spasms. It was kept in the solution until half past five o'clock (three hours in all), then taken out and put in fresh water. It died during the evening. Another lively young frog was put into the solution partially exhausted by the first frog. It was soon seized with tetanic spasms, and ultimately died while the convulsions were on it. Both died in apparently the same manner as frogs which I have poisoned with strychnia.

I believe the substance I extracted from Violet Cook to be strychnia. I did not weigh it, but estimate that I obtained about one fourth of a grain from about half of the stomach, and its contents. I believe that as much more could be obtained from the remainder of that organ and contents.

The glass and porcelain vessels used in this investigation were new, and the chemicals were pure. Moreover, all the chemicals were carried through the operations, in the vessels to be used, prior to opening the vials containing suspected matters. They were found to be free from any foreign substances.

The powder which was left was examined both by the naked eye and in the microscope, and presented the appearance

* For experiments on strychnia and other organic proximate principles in reference to the color test and its delicacy, see this Journal for April 1st, 1859, page 214.

of powdered ergot. Its constituents, so far as its diminutive quantity would permit me to judge, were those of ergot, rather than those of any other substance of a similar color to be readily obtained in a drug store or doctor's shop. Its taste and impression to the sense of touch of the tongue were those of ergot.

The only difference I could perceive between it and ergot powdered for the purpose of comparison, was the odor. Fresh ergot has a peculiar and characteristic odor. This powder was almost odorless. Ergot will lose its properties by age, especially when powdered. This powder I believe to be old powdered ergot.

The contents of the remaining bottle were examined only so far as its reaction to test papers went, and to find out the nature of the crystalline sediment. Its reaction was alkaline, and the sediment was triple phosphate of magnesia and ammonia, proved by its prismatic crystalline appearance, its ready solubility in acetic acid, and its reprecipitation in characteristic foliations and plumose clusters of crystals by ammonia.

Have never seen a person poisoned either with strychnia or with ergot. Can not say what caused the death of Violet Cook. From the testimony as given by the eye witnesses, the symptoms attending her last illness were those of poisonous doses of strychnia, as described by authors on toxicology.

THOMAS E. JENKINS, *Chemist.*

Subscribed and sworn to before me, this 7th day of June, 1859. J. M. STEPHENS, J. P. J. C.

Dr. Weldon, who was to have been called by the defense for his opinion in this case, writes the following letter at the request of Mr. Thomas E. Jenkins, chemist:

DEAR SIR:

In accordance with your request and my promise, I proceed to furnish you with my opinion, based upon the evidence in the case of the State of Indiana against Henry T. Marquam, being an indictment for murder by poisoning by strychnine.

As the case was stopped by some legal quibble before any medical testimony was introduced, I have nothing to base an opinion upon but the symptoms, etc., before death, putting aside everything I have subsequently heard respecting the ap-

pearances discovered upon post mortem examination, or the results of the chemical analysis of the stomach and its contents.

Neither do I conceive it proper to take into consideration the evidence offered in relation to the animus of the accused, or any other evidence outside of that having direct reference to the medical points in the case.

The first witness was Mrs. Cook, a respectable appearing, matronly woman, 40 to 45 years of age. She deposed in substance that her daughter, Violet Cook, was taken sick in the night after a certain Friday in March, 1855; that she had eaten a hearty supper, and that she had also eaten some hickory nuts before retiring to rest; that at 12 or 1 o'clock in the morning she awoke in much pain, and appeared to have some kind of a fit; they sent for the accused, who was their physician; after a time her daughter vomited, and when she had vomited, said that now that dose was up, she would get better. She referred by that dose or that powder to a powder she had taken just at bed-time. Powders of a dove color had been prescribed by the accused, and had been taken. The accused had attended the deceased for chills and fever for about two weeks, but the deceased had not been confined to her bed.

The Saturday, Sunday, and Monday following the Friday night above described, the deceased kept her bed, and took medicine prescribed by the accused, and some slight symptoms, as above described, but quite mild. On the morning of Tuesday the deceased was suddenly seized with fits, which recurred at intervals until Wednesday morning, when she died.

On the Tuesday morning when the deceased had the fits alluded to, she saw that she was struck with death. She was so shocked she could do but little for her assistance. The doctor accused was there most of the time and gave her medicine from time to time.

The next witness, Mrs. Rice, is a sister-in-law to Mrs. Cook, and aunt to the deceased. She went to Mrs. Cook's house in the early part of the week. Violet Cook was sick in bed; the accused was attending her as her physician; she took medicine from him. On Tuesday morning, very soon after taking a dose of medicine, she was suddenly seized with a fit; she screamed out when she was taken; her limbs became stiff,

and her body was straightened out in bed. The fits lasted several minutes, and occurred several times that day and night. Sometimes she acted like a woman in labor. When the fits were on and the attendants endeavored to render any assistance by rubbing or holding her, she would beg them not to touch her. When the fits were on they could not bend her limbs. In the night sometime she died in one of the fits, and when in the fit in which she died, the blood gushed out of her mouth and nose. She was pregnant. The accused was there all or most of the time on Tuesday, and mixed and gave her medicine at times during the day and night; she was of a bluish or lead color; her reason and perception were unclouded.

The above is all the testimony referring to the symptoms before death, and is of course ex parte (the case having been stopped at that point); therefore the opinion given on ex parte testimony must be an ex parte opinion; and I wish it to be understood that my opinion as formed upon the testimony of the above witnesses might have been modified or altered by subsequent testimony, had the case been allowed to proceed.

I have never seen a case of poisoning by strychnine in the human subject, but in animals I have. A very distressing case of poisoning by ergot I saw and attended upon twelve years ago. My attention, in common with that of the profession generally, has, within a few years, been much directed to the subject of poisoning by strychnine, and I believe I have read all or nearly all that has been written on the subject in this country, as well as much that has been written in England.

The symptoms detailed in the evidence in this case appear to me to be consistent with the assumption that the deceased had taken strychnine—the suddenness of the decease—the cry of anguish—the rigidity of the limbs—the straightening out of the body—the suddenness of the cessation of the fit, and above all the intolerance of touch, and the retention of the reasoning and perceptive faculties unclouded to the last, all leading my mind to such a conclusion.

THE DOVE COLORED POWDER.

The resemblance during the fits at some portion of the time to the actions of a female during labor; the bluish tint of the skin of that portion of the body exposed to view during life—by the hands, arms, face, and neck; and the gush of blood

from the mouth and nose, led me to infer the probability of large doses of ergot having been administered.

The fit mentioned by Mrs. Cook, the mother, as having occurred on Friday night, may have arisen from natural causes (as indigestion from the hickory nuts eaten the afternoon or evening previous), or it may have resulted from the dose of the "dove colored powder" which she took at bedtime, but it seems to me to be disconnected in characteristics with those occurring on the Tuesday following, and which terminated her life, for no mention is made in the testimony of any symptom which occurred in both.

The mother, in her testimony, said in substance that she was not alarmed for her daughter's life until Tuesday, when the fits succeeded each other with such rapidity that it was evident she could not live.

I have practiced my profession forty years in this country and in London. I have seen fits or convulsions of every character, as met with by the physician in general practice—epileptic, apoplectic, hysterical, both in males and females, tetanic convulsions from pressure of tumors or extravasations in the brain, from alcohol (delirium tremens), from poisons (other than strychnine), from malignant, intermittent, and infantile convulsions without number, but in them all I never met with a case in which was combined all the symptoms as detailed in this case of Violet Cook, viz.: Opisthotonos, extension and rigidity of the limbs, the intellectual faculties remaining uncloudced to the last, and the intolerance of touch.

These symptoms, especially when all occurring in the same case, are laid down by Taylor, Wharton, Stille, and other professors of medical jurisprudence, in their works, as the diagnostic symptoms of poisoning by strychnine. The older editions of books of that department, give but little information on this important subject, as it is only within a few years that strychnine has been much resorted to for the purpose of destroying life.

You will, doubtless, recollect that after we left the court room, you asked me to state to you my opinion, based upon the evidence we had heard before you had revealed to me the results of the chemical analysis, and that I then stated my opinion that both strychnine and ergot had been given, as I

now have, and that, after that, you informed me that you had detected strychnine in the contents of the stomach, and ergot in the powders sent to you for analysis.

I am with respect,

SAMUEL J. WELDON, M.D.

Testimony of Dr. Willis May.

Never having seen the person (Violet Cook) whose death it was charged was caused from the effects of strychnine, administered by Dr. H. P. Marquam, either before or after death, and knowing nothing of the analysis of the stomach and its contents, as made by Thos. E. Jenkins, I had formed no definite opinion as to the cause of the death of said Violet Cook; and furthermore, I am unable to state why Dr. Marquam should have made oath that he could prove by me that her death resulted from diseased lungs, connected with malarious disease, having formed no such opinion, and never having given any reason for any one to believe that such was my opinion. W. L. MAY.

Subscribed and sworn to before Jno. Pund, Justice of the Peace, Crawfordsville, Montgomery county, Ind.

April 7th, 1859.

Statement of R. T. Brown.

What Dr. Marquam might have proved by me, would depend altogether on what he could have proved by others. I am wholly ignorant of the history of the case, and of the results of the analysis, and nearly as ignorant of the pathology revealed by the post-mortem. My testimony would have been in accordance with the facts brought out in the history of the case, the analysis, and the post-mortem appearances; and I could not say what *it* would have been till I had a knowledge of *these*. And of these, I purposely preserved my ignorance.

R. T. BROWN.

We are indebted to a friend for the foregoing report, which, in a scientific view, possesses peculiar interest.—EDITORS.

REPORT OF THE COMMITTEE ON SUITS FOR MAL-PRACTICE.

Submitted at the Fourth Annual Meeting of the Kentucky Medical Society, by C. H. SPILMAN, M.D., *of Harrodsburg, Ky.*

(Concluded from page 298.)

There are four different kinds or sources of mal-practice in medicine. 1st. Reckless; 2d. Willful; 3d. Negligent; 4th. Ignorant mal-practice.

1st. By reckless mal-practice is understood all experimenting resort to new, untried modes of practice, either in medicine or surgery, except in cases where the approved and settled plan of treatment is impracticable, or has been faithfully and perseveringly tried without success, and the only hope in the case is manifestly suspended upon such innovation. In this category may be included all newly discovered, untried articles of the *materia medica* or remedial agencies, and the employment of newly invented surgical instruments, and a resort to painful and dangerous surgical operations, where the probabilities of a successful issue are against the unvarying experience of the profession, upon the ground that the case is probably hopeless without it. Such professional adventures would justly be entitled to the appellation of criminal recklessness, without the concurrence of two or more experienced members of the profession.

2d. By willful mal-practice is understood that exercise of the profession known to the administrator to be both dangerous and criminal, but tending to a result by which he expects, in some degree, to atone for the mischief inflicted, without alluding to all the instances coming legitimately within the limits of this division, which might seem less excusable. I shall cite only one, which is perhaps most common, because its appeals reach some of the noblest sensibilities and warmest sympathies of our nature, and consequently offer some of the strongest temptations to professional impropriety. What stronger appeals to generous impulses? What closer test of virtue? What sorer trial of stern duty and integrity than the imploring entreaties of her who has, in an unguarded moment, fallen victim to misfortune, frantic with despair in view of the ruin which awaits her, invoking your professional interposi-

tion? With such conflicts between stern duty, and an instinctive desire to afford relief, I doubt not you are all familiar. But neither the inflexible dictates of ethical philosophy, of which every physician should be a living exponent, nor the more unbending requisitions of positive law, will sanction the employment of any means or instrumentalities, for the purpose of provoking an abortion, except by the concurrent testimony of two or more physicians, it is decided that the safety of the mother would be jeoparded by conducting her to the full period of utero gestation. If from mal-formation of the pelvis, there is manifestly a physical disability to give birth to a child at the full period, I believe the laws of all civilized countries would tolerate the employment of means for provoking premature delivery. With this solitary exception, all such professional conduct is regarded in the eye of the law a misdemeanor, and if death of the mother result, a felony.

3d. Negligent mal-practice consists in the injury a patient sustains from inattention on the part of his physician. This inattention is the offspring of a want of a proper sense of professional responsibility, and that interest in his cases which a physician should ever feel. It is negative in its character—simply a dereliction—a sin of omission; and consequently one that the physician inclines to persuade himself is not very bad. Hence its general prevalence, and its wide-spread, fearful consequences upon the welfare of society, and the honor and usefulness of our profession. Does it not sometimes occur that the physician, in reviewing an unfortunate case, haunted by the disquieting reflection, had I been more careful and accurate in my diagnosis, had I noted more closely the different changes, had I given more particular attention to age, sex, temperament, and peculiar susceptibilities, had I been more assiduous in fulfilling the various indications as they were successively presented in the case, possibly the result might have been different. How seldom can he lay his hand upon his heart and say, "I have left no stone unturned," I have neglected no means within the limits of therapeutical art. I would not be understood, however, as restricting my remarks on this branch of the subject to a criminal negligence and inattention at the bedside of the patient. This would be presenting but a partial view of the subject, without so much as alluding to the

origin of the evil. The same professional indolence, which will betray a physician into the neglect of his patient while sick, may be traced through all the walks of life, and result in a mental incapacity to discharge his professional obligations. It is a wide-spread, pervading evil,and has contributed, in no small degree, towards weakening public confidence in the efficiency and usefulness of our art. The rapid progress of medical science for the last few years, the astonishing changes in the character as well as treatment of disease, render the most laborious toil, the most indefatigable industry, and the most diligent application indispensable to a thorough acquaintance with the ever varying phases of disease, and the diversified modifications and daily improvement in their treatment; a loose, inconsiderate habit of prescribing, in the absence of a clear, accurate and satisfactory diagnosis of the case, and regardless of the endless variety of circumstances which modify and control the practical application of our art, may be reckoned amongst the fruits of professional indolence; and although this species of negligence may be so intangible as to escape the retributions of law, yet, in its moral aspect, it is no less oblique, and in its physical consequences no less disastrous, than the direct administration of a mischievous drug, or the withholdment of a clearly indicated remedy.

We are also reminded in this connection of the extreme caution requisite in prescribing remedies of a potent character, which may, by a slight increase, be carried to a fatally poisonous dose. The patient should always be apprized of the nature of the remedy, and the danger of its incautious use. Such neglect has sometimes been attended with fatal consequences. Nothing could exonerate the attending physician from the responsibility of such event, but the exercise of the greatest possible precaution.

Under this division of our subject may be considered the exercise of the profession in a state of intoxication. By intoxication I would not be restricted to what is usually denominated a drunken state. A physician may be disqualified for professional service long before he is drunk. As soon as it may be said of him that he is neither drunk nor sober, but neighbor to both; when ethereal emanations begin to float around his brain, his tongue becomes somewhat loosened in his mouth,

his head sits a little lighter than usual upon his shoulders, his powers of discrimination become somewhat confused, and his judgment unsettled, he thus loses that perfect mental balance, cool deliberation, and close reflection, which alone can enable him to discharge the delicate, embarrassing and highly responsible obligations of professional life. Injury resulting to the patient from such disqualification on the part of a medical adviser, may be classed amongst the fruits of professional indolence, and in a judicial point of view gives magnitude to the crime.

4th. The fourth and last kind of mal-practice I shall notice, is that resulting from ignorance on the part of the physician. This is perhaps the most fruitful source of mischief, and consequently demands a more critical examination. The law of *mala fides* comes legitimately under this division of our subject. The important question involved is, whether a man, taking the place of a physician without proper qualification, is to be released from civil responsibility, whatever mischief may follow in his path, upon the ground that his intentions are good. Shall a mechanic, for want of skill and workmanship, be responsible in damages in an action of trespass on the case? Shall the officers of a steamer or a locomotive, in case of accident from unskillfulness in the conduct of their respective stations, be incarcerated in prison, or subjected to capital punishment, and the havoc upon society from medical ignorance and stupidity, be excused on the ground that no wrong was intended? The criminality in this case consists not in the immediate act inflicting the injury, which, for the sake of argument, I admit might be guiltless, but in the undertaking without previous qualification. This principle of law is settled in adjudications with regard to drunkenness, although drunkenness is adjudged an aggravation of the crime committed in a fit of intoxication. This decision rests not upon the quality of the act itself, which, perhaps, the poor fellow commits in a state of unconsciousness, but in voluntarily placing himself in an attitude involving great danger of doing mischief. Judge ye then whether the undertaker of the healing art, without a thorough medical education, does not assume a position involving equal danger, and should not therefore be held equally

responsible in damages, in case of misconduct from professional ignorance.

In this category is also included the expression of an erroneous opinion, from want of capacity to judge accurately of the subject. Just here the subject rises in such magnitude that you will indulge me, should I dwell somewhat at length. Life, reputation, property—indeed the most sacred interests connected with human society—may be suspended upon the opinion of a physician, whether in the arcana of private practice, or elicited in a judicial examination. We find a striking instance of the disastrous effects of an erroneous opinion from inexcusable ignorance, reported in the August number of the London Lancet for 1848. The case is reported by Dr. Bedford, of New York, and I am strongly tempted to give it in his own language. It would occupy too much space, however, and I must content myself with simply an abstract.

The daughter of a distinguished gentleman in England, at the age of about eighteen, became affianced to an accomplished young barrister of that country. Soon after the engagement, her health began to decline, exhibiting some irregularity in her monthly periods, loss of appetite, nausea &c., accompanied with enlargement of the abdomen, and an increase in the size of the breasts. A physician was summoned, who, after a few minutes examination, pronounced her pregnant. A second was called, who concurred with the first in opinion. The mortification, mental anguish, and blasted hopes, which such an opinion inflicted, may be more easily imagined than described. The father, crushed in spirit, unable to avert the disgrace and ruin, of which his daughter and friends had been made the victims, resolved to emigrate with her to America. She, as might have been expected, from the misguided judgment, and shameful ignorance of those who should have administered solace and comfort to her in her afflictions, sank rapidly under a train of symptoms simulating consumption. Such was her condition, when Dr. Bedford visited her in New Jersey after her arrival. Upon examination, he pronounced her not pregnant; the correctness of which opinion, was vindicated by an autopsical examination, some four weeks subsequently. This is a very brief statement of the case, as beautifully narrated by Dr. Bedford. Now can any one persuade himself, that honesty of

purpose, or sincerity of heart, is any justification, or even palliation of an opinion, which consigned to an early grave, a pure and lovely being, and crushed the heart of a devoted and confiding parent; more especially, when the chart and compass of medical science would have conducted them to an accurate conclusion. Language would fail to depict the deep-dyed criminality—the burning disgrace, incurred by such an opinion, where the lights of science, and the truths of sound morality, if consulted, would have conducted them to a correct opinion; or at least, suggested the more prudent course of giving none, where life and character are at stake.

In the Medico-Chirurgical Review, we have the following case. A man complained of inability to move his shoulder joint without much pain, and nothing could be seen externally for a month or six weeks, during which time, he was excused from duty. At length the Surgeon got tired, and suspected this man was skulking, he was ordered to his duty, but came back declaring that he could not move his arm. He was reported to the commanding officer, as feigning inability, and was actually flogged. It turned out, however, that a deposited abscess had been forming in the shoulder joint, which ultimately terminated in *anchylosis*. It seemed a little remarkable how such an amount of disease, existing for the space of six weeks, under his constant inspection, could have eluded the observation of a competent physician.

I have one remark to make in relation to these two cases. In all cases involving life and reputation, it is highly improper to give an opinion in the absence of positive knowledge. Such an opinion, if incorrect, implies either malice or gross ignorance. If the latter, however benevolent the motive which prompted it, it is condemnable on the ground that the *assumpsit* implies a fraud, and the position necessarily involves danger to all whom it may affect.

I admit the difficulty, in the present state of our science, of fixing a standard, or of estimating the exact measure of knowledge and skill required; and hence the necessity of prudence and circumspection in dispensing awards for professional conduct. He who undertakes to cure, however, tacitly contracts to exercise the art in accordance with the state of medical science in the region of his location. By this standard, there-

fore, it would seem, the propriety or impropriety of his professional conduct should be tested; and to this measure in the practice of the art, he should be held responsible.

I am admonished by the space already occupied, to bring this article to a close. It may be objected to the views I have taken, that they exhibit the profession in this cou ntry, in rather a humiliating aspect. To this I reply, that no possible good can result from supressing the truth; that these professional abuses exist, cannot be denied; and it is equally manifest that they will not be corrected until their existence with their multiplied bearings upon the interests of society, and usefulness of the profession, are clearly perceived.

I have exhibited a very brief view of the relation medicine bears to society; assigned the reasons why public confidence in its powers and capabilities has been shaken, distinguishing those for which we as a body are responsible, from those over which we have no control. I think that I have assigned reasons, cogent and irrefragable, why medical conduct should not be held responsible before a non-medical tribunal; but before a jury of peers, the only tribunal capable of dispensing just and equitable awards, it should be held to answer to the full amount of injury done, whether public or private. This I have endeavored to establish by reference to settled principles of jurisprudence, drawn from the best authorities.

I have, I hope, successfully vindicated the policy, and maintained the sacred obligation of government, by correcting the professional abuses, and fostering professional scholarship, to provide for the public able and efficient medical advisers. And, lastly, I have enumerated the different kinds of mal-practices in physic, and furnished the undeniable proof, that not only improper medical conduct, or therapeutical blunders, but even an erroneous professional opinion, may be attended with the most disastrous consequences.

I have been able to present only an epitome of this subject, having necessarily omitted many of the details which constitute part of the theme. The limited time alotted for this exercise forbade a more extended view. Enough has been said, however, to indicate the magnitude of the subject, and I trust elicit, both from the profession and from the public, for whose welfare we labor, a fuller, and more thorough examination of

the subject. With an ardent wish that our united endeavors may be to promote the usefulness of our profession, by cultivating a profound sense of responsibility, this paper is respectfully submitted.

Editorial Department.

By reference to our advertising columns, it will be perceived that the Medical Department of the University of Louisville is fully organized, and will enter upon its twenty-third session on the first Monday in November next. The faculty is constituted as it was last year, excepting that Dr. L. P. Yandell has retired, in anticipation of a removal to Memphis, Tenn., and Dr. D. W. Yandell has been appointed in his place; not, however, filling the chair which had been vacated, but that of Clinical Medicine and Pathological Anatomy. Being personally interested in, and identified with this institution, we may be pardoned for thus directing attention to its claims for support from the profession and the public. These are not based upon emptiness of words or gaseous promises of what will be, but upon the prestige of an honorable name, an existence and reputation of twenty-two years, a munificent endowment, a splendid and capacious building, a good geographical position, and a Faculty of will, ability, independence of character, and a sense of honor which will prevent them from resorting to undignified or charlatanical means to increase the class, and a sense of duty to their compeers, which will insure a prudent espionage of applicants, and a rigid scrutiny into the character of those who seek to attain through them, the honors of the profession.

The Faculty are determined to direct their attention more than ever to demonstrative teaching, being fully impressed with its importance. Clinical instruction will continue to form a prominent feature in the course, and the Faculty have ample means at their disposal, to justify them in stating that their facilities in this respect are not surpassed. The Chair of Medical Jurisprudence and Sanitary Science, is a new

creation in the Faculty, and the duties of it are of great importance. Sanitary science is to the masses what special practice is to the individual, and, in its results, may be to the former what vaccination is to the latter. That which interests communities, must interest each individual who aids in forming them, hence that branch of Medical Science which has reference to both the individual and collective condition of man, is of paramount importance. Physiology will be taught in conjunction withAnatomy and Chemistry especially, and incidentally by such Professors as may desire to teach it for purposes of illustration or demonstration. From this change we conceive the student will derive advantage; for except in chemical and experimental physiology, his books will guide him as profitably as lectures. Constituted as the Faculty now is, and with the present division of subjects, we are confident that more practical information will be gleaned from one course than is generally taught in two.

We are happy to be able to assure the friends of the Institution, that its prospects are bright and cheering, and that we are already receiving letters of promise and inquiry, which lead us confidently to expect a large increase over last year's class.

Professor L. P. Yandell.—This gentleman, who has been associated with the Medical Department of the University of Louisville, throughits infancy and adolescence, has now determined to leave it, in the full vigor of its maturity, and exert his well known energies in another sphere. The associations of nearly a quarter of a century cannot be easily severed; for the longer we live, the less inclined we become to say farewell. Growing with our growth, and strengthening with our strength, are the ties which bind us to those we love, and at every year we attach new charms, and entwine around us new affections. So gradual and noiseless may be their development, that we fail perhaps, to recognize their force, until we have attempted to break loose from the sweet bondage in which they held us; then do we perceive that it had not been with chains alone that we had been united to those around us, but at every advancing step in the progress of our extrication, we snap asunder a cord, a thread, a hair, a web it may be, which had not before

been visible, and these, the weakest, become the strongest, because of their multiplying and unlooked for power. Our friend will feel these truths more keenly as the period fixed for his departure approaches. Negations in society may change their locality without leaving a ripple upon the circle from which they emerge, or causing one upon that which they enter. Not so with positive men, not so with Professor Yandell. He is not a negation. We understand that it is his intention to leave in July, for Memphis, Tenn., whither he goes to establish himself in practice, and doubtless also to exercise his resurrective powers upon the Medical School of that fine and flourishing city. We heartily wish him success in both. In the former, because of his learning, judgment and skill; in the latter, because of our veneration for himself, and a quiet attachment which we have long had for the city of his choice. We can remember that in the first year of our own career as a teacher, which was in 1847, an eminent Professor, and friend, urged strenuously that we should locate there; for, said he, Memphis must of necessity become an important point for medical teaching. We have always agreed with him, and now that our indomitable colleague purposes to place his shoulder to the wheel, we know that it must become so. We regret that we cannot, in this number, publish his feeling letter of resignation, and the equally kind resolutions of the Faculty in answer thereto. We hope to publish both, in our next number.

Those gentlemen who have resorted to this city during the past ten years for medical instruction, will, in common with the friends of the University, rejoice to hear that Dr. D. W. Yandell has been appointed Professor of Clinical Medicine and Pathological Anatomy in that Institution. If acknowledged ability, laudable ambition, indefatigable zeal, fluency of language, and long experience, are bases upon which to build hopes of success, we are justified in anticipating for Professor Yandell an enviable rank as a teacher of medicine. We congratulate the Board of Trustees upon the selection they have made, and the Faculty of the University on his accession to their force.

One of the most desirable locations, for the practice of medicine, in the state of Kentucky, may be heard of by applying to the editors of this Journal. An old, experienced and popular Physician, is about to retire from practice; his successor can obtain speedy introduction to a lucrative practice. He must bring satisfactory testimonials of competency and experience; none other need apply. He will be expected to buy the property of the retiring Physician, and from our personal knowledge of the vendor, we are enabled to say, that his terms will be fair, and his representations entirely reliable.

Louisville: Her Commercial, Manufacturing, and Social Advantages, including a Sketch of her History, Topography, Schools, Health, etc., etc. By Richard Deering.

This is a valuable pamphlet of 100 pages, setting forth the advantages of our beautiful city with faithfulness and accuracy. We extract a paragraph in reference to the "Health of Louisville:"

The climatic position of the city of Louisville exempts her alike from the ravages of tropical diseases, and from the epidemic visitations of Typhus fever. Forster was the first naturalist who published the fact, that the interior valley of the North American Continent was singularly exempt from the extremes of temperature that belong to the Atlantic coast. Thus, yellow fever has repeatedly prevailed in New York, Philadelphia, Baltimore, Norfolk, and Portsmouth, whenever abnormal temperature was coincident with proportional humidity and decaying vegetable matter. But that tropical disease has never been above 35° of latitude in the interior valley, and only once at that point. Louisville is in the 38° of latitude, and is far above the highest northern limit of yellow fever in the interior valley, and far below the southern line of the Typhus fever zone. This geographical position furnishes ample security against the invasion of these forms of disease.

Case of Unsuspected Lead Poisoning in a Cooper. By Frederick James Brown, M.D., Chatham. *Read March* 25, 1859.—William R., aged 28, came to Chatham from Wateringbury, about Michaelmas 1856. He obtained employment as a cooper in a brewery. He immediately became affected with ague, and suffered from it for several months.

In April 1857, he first worked amongst some white lead casks, bought in the town from a broker that had obtained them from the dockyard, at a public sale. The casks were taken to pieces and put together again, to render them fit for the packing of bottles of ale. Some of the casks contained so much as half a pound of white lead. A dust was created during the separation of the staves of the casks, which was respired by the cooper. The dust also formed a layer in the premises, and the man's feet became dry and shrivelled up, in consequence of the direct application of the dust to them, owing to his shoes being low. The man experienced pain and cramp in his feet, and he became scarcely able to walk; but he was cured of fœtid perspiration of the feet, to which affection he had been subject. At the same time, he spat thick, heavy masses, which he believed to be particles of white lead taken into the bronchi during respiration.

In July, he began to suffer from indigestion, with colicky pains and costiveness. Attacks of this description compelled him to lay up occasionally for about a week at a time. He regarded them as seizures due to the ague that he had formerly suffered from, and he accordingly took quinine and Epsom salts. It was only occasionally that he worked amongst the white lead casks; but on every occasion he suffered.

I first saw him on July 31, 1857. I knew that he was a cooper, employed in a brewhouse; but I was not informed of the circumstances connected with the casks, and I had no suspicion of lead poisoning. The case appeared to me to be one of dyspepsia, but I could not understand the symptoms.

The treatment that I employed afforded but little relief; and it was so late as September 24th, eight weeks from my first visit, that I at first thought of examining the gums. The blue line of lead was well marked. The circumstances connected with the casks were elicited upon due inquiry; and the patient was discharged cured in four days.

The treatment that was adopted when the nature of the case was understood, consisted of Epsom salts, with the sulphuric and phosphoric acids.

I have thought this case worthy of your attention, because of two points in it. *First*, it shows the value of inspecting the gums, as well as the tongue; if not in every case, at least those that present anomalous symptoms, or that resist ordinary treatment; and, *secondly*, it shows the importance of understanding the true cause of any instance of disease.

In this case, fifty-six days were spent in useless treatment; whilst four days sufficed to cure the patient when the correct diagnosis was established.—*British Medical Journal, April* 23.

Semi-Monthly Medical News.

VOL. I. LOUISVILLE, KY., JULY 1, 1859. NO. 13.

TWO CASES OF FRACTURE OF THE FEMUR.—*The Starch Apparatu as an Immediate Dressing—Its Efficacy.* By ARCHIE B. COOK, A.M., M.D., *Demonstrator of Anatomy, University of Louisville, etc.*

The two following cases are given in illustration of the efficacy, safety, and reliability of the Starch Bandage in the treatment of fractures of the femur occurring in children.

For these cases I am indebted to J. E. Crowe, M.D., who observed with me, from day to day, the progress and happy result of the treatment.

Case 1st.—Austin S., aged four years and six months, on Jan. 4th, 1859, was crushed beneath a steamboat staging, which fell a distance of seven feet. I saw him with Doctor C. two hours after the accident.

An examination revealed a transverse fracture of the left femur at the junction of the upper and middle thirds, and a compound fracture of both bones of the right leg about the middle. The left thigh was shortened about one inch, the skin tense and red from the tumefaction. Placing the patient upon a hard mattress, the fracture was reduced by flexing the limb slightly, and making gentle extension and counter-extension. I then proceeded immediately to apply the starch apparatus. The materials necessary to have at hand are a roll of carded cotton, three single headed calico or cotton rollers (for children two inches wide and nine or ten yards in length), a sheet of book-binder's pasteboard, or a good quality of the common domestic pasteboard, a vessel of warm water, one quart of starch made the consistence of paste and boiled for ten or fifteen minutes, and a straight splint for temporary ex-

tension and counter-extension. The bony prominences and depressions about the joints were first enveloped with cotton. The limb being then elevated and extended, a dry roller was applied smoothly over its entire extent, commencing at the toes, leaving the first phalanges exposed; the bandage was drawn firmly over the foot and leg, and applied more loosely over the swollen thigh, several reverse turns being made at the groin, by which the bandage was carried well up over the left nates to control the action of the glutei muscles, and was secured by four or five turns around the lower part of the trunk. The surface was next smeared with the starch, and four splints of stiff pasteboard, previously softened in the warm water and well starched on both sides, were moulded to the limb—one posterior extension from the upper contour of the nates to three inches below the heel (width of upper end four inches, lower two inches), two lateral, the external reaching from the trochanter-major below the external malleolus; the internal from the perineum to the internal malleolus; the anterior from Poupart's ligament to the patella, the splints, with the exception of a small interspace between the posterior and lateral, enveloping the limb. Over the splints another roller, commencing at the toes, was applied, both surfaces of which were starched at each turn around the limb. It was secured as the first, by three or four turns around the lower zone of the trunk. The starch was again smeared over the surface, and the third roller applied as before, only starching the surface next the limb and the folds at the reverse turns. Moderate extension and counter-extension were made in the usual way, with a straight splint, perineal bandage and cravat for the ankle, to keep the limb extended until the bandage had become dry and consolidated.

On the third day after the dressing, the bandage having become perfectly dry, so as to form a firm and immovable casement for the limb, the counter-extension splint was removed and its use dispensed with altogether.

On the sixth day from the first dressing, the bandage, from the subsidence of the inflammation and tumefaction, had become loose. I divided it along the external contour of the limb with a pair of tinner's shears, and removed a strip one-half inch in breadth, the whole length of the bandage. The

bandage was pressed aside to expose the limb, which was rotund, without swelling, of natural temperature, and revealing, upon manipulation, perfect apposition of the fragments. A narrow strip of carded cotton was then placed along the limb corresponding to the edges of the divided bandage, to prevent irritation or excoriation, gentle extension was made, the bandage pressed close to the limb and retained with a single-headed roller, commencing at the toes, which was carried up to the pelvis, and secured by a few turns around the trunk.

During the further treatment of the case, the roller, at intervals of about one week, was removed for the purpose of inspecting and accommodating the starch bandage to the natural shrinking of the limb. At one of these examinations we observed too great a prominence of the femur on its outer surface; this was counteracted by a compress of lint interspersed between the thigh and bandage, which was adequate to fulfill its design—straightening the femur.

On the 15th of February, six weeks after the accident, the dressings were removed; the limb was straight, firm union had taken place, and careful measurement and comparison with the opposite extremity, detected no perceptible shortening.

The right leg, after reducing the fracture, checking hemorrhage, and drawing the edges of the wound together with adhesive straps, was, for the first few days, placed on a hair pillow, which was secured around the leg by three tapes; and cold water dressings were assiduously applied over the seat of injury to keep down inflammation.

On the 6th day everything looked favorable, the leg was dressed with bandages, and three pasteboard splints (one posterior, two lateral) moulded to the limb and well wadded with cotton, the splints reaching from the middle of the thigh to the foot, an opening was cut through the dressing, opposite the wound, and the leg being replaced on the pillow, was secured by the tapes.

During the following five weeks the leg was examined three or four different times. The wound, which was deep, healed by granulation. At the last dressing a small compress of lint was placed over the wound, and held by the adhesive straps

to repress exuberant granulations, which appeared at two points.

On the 15th February the wound had entirely closed, and was covered with healthy cuticle, when all dressings were removed. The nurse was ordered to keep the little patient in bed for a few days, and to rub gently several times a day, the lower extremities, and especially the joints, to restore muscular tonicity, and relieve the stiffness of the articulations necessarily induced by the long confinement.

The constitutional treatment requires but a brief notice. The patient had, for the first three days, some fever and was restless at night, for which he was ordered cream of tartar water as a beverage during the day, and at bedtime, for the first two nights, forty drops Tr. Hyoscyamiæ; the third night. Pulv. Doveri grs. xii, divided into four powders, one powder to be taken at intervals of three hours. The following day he slept most of the time, and after recovering from the effects of the opiate, he had no more fever. During the whole period of treatment, the first three days excepted, his general health was good; the bowels were regular; his appetite was indulged in every thing the caprice of a child might crave; he was always cheerful and lively, and, to our astonishment, appeared to enjoy the partial confinement—partial, I say, for the simple nature of the dressings allowed of free motion of the trunk and upper extremities. The box apparatus would, at present, be my preference for the treatment of compound fractures of the leg; but in this instance it was necessary to select appliances which were not only reliable, but would conduce most to the comfort of the patient. The elevated and partially flexed position of the right leg, resting on the pillow, could be borne with much less fatigue than the straight posture; it, at the same time gave him a liberty of motion which could not be procured by any form of fixed apparatus.

April 5th, three months after the injury, I saw this patient, instituted careful comparative measurement, and found both extremities of equal length.

Case 2d.—Fracture of the right femur in a child three weeks old. I was invited by Dr. C. to see this case on February 20th, 1859. On inquiry I learned the child had, two nights previously, fallen out of bed, and had since that time given

evidence of much pain and suffering. The injured limb presented an arched appearance—the convexity anterior—which was caused by the contraction of the ham-string muscles; it was tumefied, rigid, and red. The circumference, at the point of injury, measured 7¾ inches, that of the sound one at a corresponding point being only six inches. When the limb was grasped and gentle extension and counter-extension made, a false point of motion and distinct crepitus were readily detected a little above the middle of the femur. In this case I first enveloped the whole limb with carded cotton to protect it from undue pressure or excoriation, and applied over this the starch bandage, using lighter splints and narrower rollers. During the drying process, the apparatus and limb were held in position by a pasteboard splint placed on the posterior surface, bent to the natural flexure of the limb in infants, and retained by tapes. The suffering of the child was relieved as soon as the dressing was completed, and it did not, at any time afterwards, appear to suffer either pain in the mutilated thigh or annoyance from dressing: it nursed well, slept well, and gave little further trouble.

March 3d. The bandage, from the subsidence of the swelling, having become too loose, was removed. The limb was now of natural size, circulation good, and no crepitus being detected, we concluded union by callus had taken place. A new starch bandage was applied as before, with an improvement in the length of the anterior splint. This was cut of sufficient length to extend some distance up over the lower part of the abdomen, making an angle over the inguinal region. When the starched roller is carried over this splint, it prevents any slipping or shortening of the bandage while drying, and when dry, forms a more complete casement for the limb, and restrains more effectually muscular contraction, which is the chief agent in producing displacement of the fragments. And here let me suggest that in fractures of the upper third of the femur, where additional security is deemed advisable, a compress could be interposed and held by the splint over the outer half of the inguinal region, which would aid, by compression of the superimposed soft parts, in controlling the action of the biceps flexor femoris as it passes out through the crural arch to its insertion into the trochanter-minor.

On the 23d of March this bandage was removed, and we had the gratification of witnessing what might be termed a perfect cure.

It will be observed that in the above case the extremity was examined only once from the beginning to the end of the treatment, and this for the purpose of reapplying the bandage. The general appearance and shape of the starch cast, together with the evident comfort of the child, satisfied us the fracture was doing well, and the activity of the capillary circulation, as indicated by pressure on the toe-nails, was an unerring monitor to the well-being of the soft parts. The cotton, which was first applied, had, by its elasticity, exerted equable pressure on all parts of the limb, had protected it from indentations or undue pressure at any point, and had effectually obviated the troublesome complication of excoriations about the nates and perineum, which are, with other fracture apparatuses and appurtenances, often a source of vexation to the surgeon, and a cause of painful annoyance and suffering to the patient. The advantages of the starch apparatus were brought to the notice of the profession years ago, principally through the high recommendation of M. Lentin, of Brussels, who employed it as the first dressing, immediately after the occurrence of the injury, with good results. Others have since added their testimony to its merits. M. Burggraeve, of Ghent, recommended that the limb should first be enveloped in cotton, claiming that the elasticity of the cotton would adapt itself to the diminished size of the limb, that it would exert equable pressure, and prevent the bandage becoming loose as the swelling subsides.

In the second case reported above, the cotton appeared to fulfill admirably all the advantages claimed for it. Erichsen, although acknowledging his many misgivings as to the propriety of using it before the subsidence of the swelling, was induced, on the recommendation of Sentin, to give the novel treatment a fair trial. During the course of one year he used it in fifty or sixty cases of fracture, including some of the thigh, and after satisfactory evidence, gives the apparatus his unqualified approval. He says: (Am. Ed.) "At the hospital I now rarely ever use any other plan of treatment."

In this country its adoption, as an immediate dressing, has

been very limited, while many surgeons acknowledge its excellence in the more advanced stage of treatment.

The chief objection urged against the early use of this simple, safe, common sense apparatus, is the fear of an increase of the swelling, causing congestion, sloughing, or mortification, from strangulation beneath the unyielding bandage. If the first phalanges of the toes are left open to inspection, the occurrence of a little uneasiness in any part of the limb with the sluggish condition of the circulation as indicated by pressure on the toe-nails, would forewarn of danger, and the apparatus could be readily removed. The same objection might be urged with equal force against any other form of bandage; besides the distinguished gentlemen, whose names vouch for the safety and propriety of the treatment, do not urge the objection or even speak of any risk if the bandage is properly applied. It is necessary in this as in any other appliance to a mutilated limb, to use due caution; to apply the bandage more firmly to the distal side, and more loosely over the seat of injury, and to the proximal side of the extremity. If the first roller is not drawn too tight over the parts surrounding the seat of injury, danger from pressure or an increase of swelling need not be apprehended.

To sum up briefly the advantages in fractures of the starch or immovable apparatus, we would first determine the indications to be fulfilled, consulting the present comforts which can be conceded to the patient, consistent with a creditable and satisfactory cure. The indications are, coaptation of the fragments, their retention by the simplest agents, and the prevention of inflammation. Surgical mechanics are so governed by the various groups of flexors, extensors, abductors, adductors, and rotators, that relaxation of the muscular groups, which cause shortening and deformity, can, in almost every instance, be accomplished by position, not force. The starch apparatus has superior claims as a retentive means—it is simple, easily applied, forms a complete encasement for the whole limb, prevents, when properly applied, displacement of the fragments, keeps up, from day to day, on all the muscles permanent and equable pressure, which is the most certain remedy against muscular spasm and permanent muscular contraction; it does not become displaced, does not necessitate change of position

for readjustment; when dry it dispenses with the inconvenience of extension and counter-extension; and last, but not least, it does not confine the patient for weeks upon a fracture bed.

It is the most reliable local antiphlogistic. Erichsen says:

"I find that the moderate pressure of the bandages, aided probably by the great evaporation that goes on during the drying of so extensive and thick a mass of wet starch, and which produces distinct sensations of cold in the limb, takes down extravasation most effectually, and enables the patient usually to leave his bed about the third day after the injury, when the fracture is in the leg or ankle, and about the sixth when it is the thigh that is broken; so that very commonly we now treat all patients with simple fractures of the leg, and many of those of the thigh, especially in children, as out patients."

It is his custom, after the bandage has become dry, to support the limb in a sling passed over the neck and under the foot, and allow his patients, with the aid of crutches, to move about.

I have not seen any statistics which show the amount of shortening in simple fractures of the shaft of the femur treated with the starch apparatus. Dr. Hamilton, in his valuable report on deformities after fracture, records fifty-six cases of simple fracture of the shaft of the femur treated with the approved forms of apparatus—the great majority with the straight splint. The average shortening of forty-seven of these simple cases was "three quarters of an inch and 1-47; in nine cases only no shortening occurred; the ages of those perfect cures ranged from one to fifteen years—one case at one year, three at three years, one at eight years, two at nine years, one at thirteen years, and one at fifteen years.

In the forty-seven cases of imperfect cure, nineteen cases occurred between the ages of five and fifteen years. The least shortening in three cases, aged respectively six, seven, and ten years, was one-quarter inch; the greatest, one case aged nine years, one and a half inches. From these statistics it appears that shortening, irrespective of age, is to be expected in nearly five-sixths of the cases; that it occurs between the ages of five (one case aged five years, three quarters of an inch shortening)

and fifteen years in about two-fifths of the cases of simple fracture of the femur, the degree of shortening varying from one-quarter of an inch to one and a half inches. Should the statistics of simple fractures of the femur, treated with the starch apparatus, exhibit a result which would compare favorably with the modes of treatment now in common use, then, for obvious reasons, it is decidedly preferable. I have not yet had an opportunity to test its virtue in the adult, but would not hesitate to use it in any case of simple fracture. In the adolescent or adult, I would use heavier splints and two or three additional starched bandages (Scultetus', the best) over the thigh, to make the apparatus perfectly secure and of sufficient strength to command the muscles. After dividing the bandage on the fourth or fifth day for the purpose of tightening it, instead of using tapes or the single roller, I would retain it with Scultetus' bandage, which could be laid open for the inspection of the fracture, without disturbing the repose of the limb.

By taking the precaution to have a narrow interspace between the posterior and lateral splints, the bandage, after division, can be pressed aside to expose the seat of injury to frequent inspection, to make due measurements, to guard against undue shortening, and, if necessary, to make extension, as I did in the first case on two occasions, by grasping the foot and drawing it down, while an assistant presses the bandage firmly to the limb, which pressure is to be continued until all is made secure again by the dry roller, or, what is preferable, the Scultetus bandage.

Some have used and recommended tapes for this purpose, but it constitutes too important an element of success to be trusted to three or four tapes, bound around the bandage at different points. If the limb, in an oblique fracture, or in the athletic patient, after the adoption of the above precautions, was still disposed to retract and cause deformity, I would institute a simple and reliable method of permanent extension, by cutting two straps of adhesive plaster, two and one half or three inches wide, and long enough to reach from a little above the knee to five or six inches below the foot; then, while an assistant presses the bandage aside, apply the straps previously heated, to either side of

the leg, and carry the free ends through an opening cut in the foot piece of the starch bandage, tie the ends to form a loop, to this attach one end of a cord or piece of twine passed over a pulley fixed to the foot-board of the bed, and make the necessary extension by attaching a weight to the free end of the cord or by tieing to the cord a small bag filled with pebbles, shot, or any other solid materials at hand, and regulate the extension by adding to or subtracting from the weight, according to the indications in each particular case. This additional security, in special cases, would neither interfere with the utility of the starch bandage nor incommode the patient.

CASES OF TETANUS.

On the 12th March, 1852, I was called to see a white boy, aged twelve years, whose right hand had, one hour previously, been caught in the teeth of a threshing machine, laying bare the os magnum of the carpus, and fracturing and dislocating the metacarpal bone of the ring finger, producing an extensive wound of the dorsal surface of the hand. I removed the head and about one half the metacarpal bone, and brought the wound together with adhesive straps, and over a layer of patent lint and simple cerate applied the warm water dressing. From this time on the patient complained of pain, and was only moderately comfortable under the influence of opium. I saw him every day; kept the hand moist, the bowels relaxed and the patient partially under the influence of opium. No symptoms of a threatening character made their appearance until the evening of the 18th.

In the morning visit the wound was dry. Suppuration, which had begun very nicely, was arrested; the patient was restless, and complained of intense pain Ordered poultices of hops and charcoal, and left.

At 5 o'clock, P. M., I was called in haste, for the little fellow was having violent convulsions. I found him laboring under a violent attack of that form of tetanus—opisthotonos—which involves the extensor muscles; the spasms followed each other in rapid succession, never entirely abating. The wound

was now presenting a disorganized appearance, putrid and moist, with a thin, offensive sanious fluid. The patient died in six hours, without any treatment but the inhalation of chloroform, from the fact that the power of deglutition was entirely lost, and any attempt to swallow was followed by an alarming aggravation of the convulsions. Chloroform allayed the paroxysms, but did not protract the life of the patient.

Case 2d.—This case occurred on the 16th of April, 1857, in a negro woman, aged nineteen years. On the 8th April I was called to see this woman, who had received a puncture from the small blade of a knife, not more than one-fourth of an inch in depth, in the knee cap. I was called on account of the hemorrhage, which they said had been considerable, but had entirely ceased. I made no prescription for the wound. This girl was just recovering from a protracted attack of typhoid fever; was able to sit up and walk about the cabin. She continued to improve in general health, and the wound attracted no attention, because from it she suffered very little inconvenience.

On the morning of the 16th she awoke, complaining of contraction and unpleasant feeling about the jaws and throat. In a few minutes, twitching of the muscles was observed about the head and neck; this soon extended over the whole body. I was immediately sent for, and found the patient lying inclined to one side, with the muscles so contracted as to form a complete arch of the body.

In this case I gave whisky, but I regret that I did not carry it to deep intoxication. I relied on the inhalation of chloroform, which, as before, counteracted the paroxysms and rendered the patient somewhat comfortable. I gave as much opium as I felt warranted in giving to a single patient—about ten grains during the twelve hours. I examined the wound, which, I was told, on the day previous presented the appearance of being almost entirely healed, and found issuing from it a very foul, sanious fluid. I laid the wound freely open, and exposed a cavity larger than a Mexican dollar. There was very little inflammation and very little blood followed the cutting. She had not complained of pain at any time, and upon reflection the family said she had not complained of the knee hurting her from the time she received the injury. During

the day the bowels were freely moved by injections, and the paroxysms or spasms were light, except when she was allowed to pass from under the influence of chloroform. The pulse increased from 100 to 150 per minute; consciousness remained undisturbed, the patient complaining of great pain and prostration until 6 o'clock, P. M., about thirteen hours from the occurrence of the tetanus. She died.

Case 3d.—This occurred on the 1st of April, 1859, in the person of a white boy, aged 11 years, cousin to case first, who, on the 24th March, eight days previously, had received a slight abrasion on the instep of the right foot. He did not complain much from it, nor did it interfere with easy locomotion. It healed kindly without presenting any untoward symptoms.

On the night of the 31st March, he awoke suddenly with a violent convulsion, and referred to great pain in the abdomen, which was extremely rigid. The family regarded it as a worm fit. I was not sent for till morning, and found him at 9 o'clock lying inclined to the left side, the extensor muscles permanently contracted, holding his body in a fixed arch. I moved the bowels freely with injections, then gave calomel grs. 5, opium gr. $\frac{3}{4}$, ipecac grs. 3, every three hours until four portions were given.

In the evening at 9 o'clock, I found the symptoms rapidly increasing. Pulse 160 per minute, the body fixed and immovable, with frequent paroxysms of most excruciating suffering, manifests consciousness but can not speak. In order to allay his suffering, and because he could swallow nothing, I gave him chloroform by inhalation, but with the same result as in the former cases. He became quiet, could speak, and expressed great relief, and called frequently for the chloroform during the night. I began to hope for better results in the case; but, on the following morning, intervals of administering the remedy were increased from 10 or 15 minutes to 25 or 30 minutes, when suddenly a violent spasm came on, in which he died.

It will be observed that all these cases occurred in the months of March and April; that one of them only was attended with pain, which is so common a precursor of traumatic tetanus; two of the wounds were in an ill condition, one

entirely or almost entirely healed. In this case I excised the cicatrix twelve hours previous to death, and found nothing at variance with the most healthy condition of the cicatrix. The consanguinity between two of these cases is not enough to direct suspicion to hereditary predisposition to this disease without corroboration from other collections.

H. K. PUSEY.

Garnettsville, May 26, 1859.

AN EXAMINATION OF THE QUESTION OF ANÆSTHESIA, *arising on the Memorial of* CHARLES THOS. WELLS, *Presented to the U. S. Senate, 2d Session, 32d Congress, and referred to a Select Committee, of which the* HON. ISAAC P. WALKER *is Chairman—Prepared for the Information of said Committee by the* HON. TRUMAN SMITH, *U. S. Senator from Connecticut.* New York, 1859.

"Rejoice in the existence of every thing that rejoices to exist."

"Go—go, poor devil—get thee gone—why should I trust thee? This world is, surely, wide enough to hold both thee and me."

If these expressions belong not to human nature, but to individual men; if they do not indicate something of the gentleness and love which, mingled with coarser elements, touch and soften every human heart from Adam down to us, but animate only the isolated here and there in the long line of 6000 years, then surely the doctrine of metempsychosis is true, and the spirit of Lavater and of Uncle Toby have passed the boundary of their "hereafter," and appeared again in the forms of Dr. Wells and Prof. Simpson.

Secure as we are in the possession of an anæsthetic, it interests but few to inquire by what process, or by what accident, the great agent has been developed. We solace ourselves with the consciousness that pain is no longer king, utterly careless by whose prowess the old monster has been uncrowned.

The use of chloroform is so general, and the fame of Prof. Simpson so universal, that we are apt to overlook the fact that there have been other agents and other names connected with the same great object, and well worthy of a place in the mem-

ory of those who claim the guardianship of medical agents and medical fame.

That many substances have been long known to possess the power, to some extent, of modifying the sensibility of the animal organization, enabling it to bear with some composure the frightful pain of amputation and of childbirth, as well as the more deliberate torture of rheumatism and toothache, every body understands; but the discovery of an agent which could utterly overwhelm the sensational life, and hold in safety the essential vitality, was reserved for a very late period, and for an earnest, thinking, loving devotee to science and to truth.

We propose, very briefly, to look at the claims of Dr. Wells, of Connecticut, to the high praise of first applying an anæsthetic agent to the purposes for which the chloroform is now so generally used.

The mere intellectual conception of the probable existence of such a power, is not enough to secure the attention and gratitude of mankind; the fact must be demonstrated, and a sufficient number of persons must know of the demonstration. Upon both these points the book before us is filled to repletion with proofs. To us, possessed as we are, of a half a dozen agents producing very nearly the same results, it is a matter of no importance which particular one was first used as an anæsthetic—sulphuric ether, nitrous oxyd gas, chloric ether, chloroform, are all now known to be available to this end. The nitrous oxyd gas is the agent which arrested the attention of Dr. Wells.

It seems that in December, 1844, a Mr. Cotton delivered, in the city of Hartford, Conn., a course of lectures, during which course he administered to various persons the nitrous oxyd gas —or, as it is called, the laughing gas—one of these persons having injured himself during the exhibition, and while under the influence of the gas, "afterward remarked that he *was not conscious of the injury*, and did not *know* that he had *suffered an injury*." This was clue enough for the ingenious and philosophic Wells. If this man suffered real injury and felt no pain, why not pull his tooth, or amputate his leg without pain, under the same influence? Why not, surely? But whose tooth, doctor? Having full faith and a bad tooth, Dr. Wells is, himself, the first patient the world ever saw under the full influ-

ence of a power destined steadily and quietly for all after him to rob physical pain of half its horror. On the 11th of December, 1844, the first tooth was drawn without pain under the reign of anæsthesia.

One single satisfactory experiment was enough to encourage the eager prosecution of this new idea, and day after day and month after month, did Dr. Wells, assisted by his friend Dr. Riggs, perform all their painful dental operations by the aid of the nitrous oxyd gas. Certificates are numberless as to the safety and completeness of the anæsthesia during 1845–6. It has been suggested more than once that since the glory of the discovery has settled upon others, the presumption is fair that Dr. Wells, though the earliest who thought out the idea, did not readily put it into practice in such sense as to *establish* its truth. The book under notice gives us the sworn depositions of Drs. Riggs, Marcy, Ellsworth, Perry, Braddock, Crofoot, Dodge, and many others, professional associates and neighbors of Wells, all confirming the fact of its use and its safety during a period of two years. To the testimony of these professional men add the names of Goodich, Burleigh, J. G. Wells, Lee, Haverss, Martin, Slocum, Goodwin, Whiting, Williams, Richardson, patients; and enough others to fill several pages of this Journal, and how is it possible to regard the discovery as a mere conception, unrealized? If testimony can prove any thing, it was more than a conception—it was a true birth, and lived and wrought wonders, till, in the course of time (naturally enough) another member of the same family came to take its place and perform the same wonders upon a large sphere and with greater readiness and greater safety. In our admiration, however, of the youngest born and most popular, we should not overlook the fact, important to truth, that Dr. Wells was the very father of the first born.

The case of Henry A. Goodale, operated on by Dr. P. W. Ellsworth—amputation of the thigh. "It was a bad case and well calculated to test the power of the gas. The operation was entirely successful and fully equal to any similar operation under the influence of sulphuric ether or chloroform.*

The case of Mrs. Gabriel—removal of a tumor from the shoulder, by Dr. S. B. Berresford, the operation lasting five or

* Extract from Deposition of Dr. Ellsworth.

six minutes, and weighing six or seven ounces. "Quite as successful as any operation so far as destroying sensibility was concerned."*

The removal of a large schirrhous testicle by Dr. E. E. Marcy, who states by deposition his entire satisfaction with the effects of the gas. These various and painful operations, witnessed by many different persons, professional and lay, are surely sufficient to rebut the pretensions that Dr. Wells did nothing more than conceive the idea of the probable existence of an agent which would so far subdue the sensibility as to permit any of the operations of surgery or dentistry without pain.

The deposition of one so distinguished as Dr. Valentine Mott, of New York, must have due weight with the profession. He unhesitatingly and fully accords to Dr. Wells, "the credit and honor of the discovery."

Surgeon J. B. Porter, of the U. S. Army, says of anæsthesia: "I have always believed it to be due to Dr. Horace Wells."

Drs. Mignault, Curtis, and Ball, of Boston, witnessed operations under its effects as administered by Dr. Wells, and so state over their proper signatures. And Dr. C. H. Haywood, formerly House Surgeon of the Massachusetts General Hospital, writes, "That to the spirit of Horace Wells belongs the honor of having given to suffering humanity the greatest boon it ever received from science."

A careful perusal of the entire work of Hon. Truman Smith has left no doubt on our mind as to the origin of that great idea which has resulted through the labors of Prof. Simpson in the inauguration of that almost omnipotent princess, anæsthesia, before whose sway we all bow with thanks and gratitude for so gentle and so beneficent a control.

Without entering at all into the controversy which has been protracted and bitter in regard to the paternity of this discovery, we conclude this notice by stating a few points which are perfectly susceptible of proof, and have been, to our mind, abundantly proven.

That in December, 1844, Mr. Cotton delivered a series of lectures in the city of Hartford, upon Chemistry and Natural Philosophy; that on the 10th of that month one of his audi-

* Extract from Deposition of Dr. Berresford.

ence, while under the influence of nitrous oxyd gas, received physical injuries of which he seemed to be unconscious, and *afterward stated* that of the *injuries he was unconscious;* that on the succeeding day, the 11th of December, 1844, Dr. Horace Wells had himself placed under the same influence, and had a tooth drawn without evincing pain, and afterward stated that he was unconscious of pain; that from this day forward he continued for two years to use the nitrous oxyd upon all such as were willing to submit to it; that his associates in dentistry adopted, to a greater or less extent, the same agent; that Henry A. Goodale suffered amputation of the thigh at the hands of Dr. Ellsworth; that Mrs. Nancy Gabriel suffered the removal of a tumor weighing six or seven ounces at the hands of Dr. Berresford; that Dr. Marcy removed a scirrhous testicle from a youth while under the anæsthetic influence—all without pain, and all during 1844–5, 6, and 7. Add to this the testimony of Dr. Mutter, of Philadelphia, Prof. Abner Jackson, of Trinity College, Connecticut, and Prof. Willard Parker, of New York, confirmatory of the general views here presented, and we are utterly at a loss to see how the name of Horace Wells can fail to be associated with that glory which the world is always ready to accord to the benefactors of humanity. S.

Chloride of Zinc in Gonorrhœa and Gleet.—M. Longouest, of Paris, recommends the injection of a solution of chloride of zinc (one thousandth part in recent and one five hundrdeth in old cases) once daily, and retained in the canal four or five minutes.

There does not appear to be any thing in the results he obtained in recent urethritis to recommend the practice over that of other well known remedies, but in the treatment of gleet he had much better success. In seventeen cases, most of them obstinate, and which had been treated in vain, the mean duration of treatment with the chloride of zinc injections was nine days. The remedy usually caused no pain, and was very rarely followed by accidents—*Gaz. des Hop.*

THE CINCHONA TREE.

The following interesting letter contains some valuable information to persons in this country, which will be enhanced by the knowledge that Mr. D. Jay Browne, of the Agricultural Bureau of the Patent Office, has taken the initiative steps to procure seeds, and will distribute them in the various parts of the country for experimenting. It is from the bark of this tree that the celebrated tonic, known as quinine, is obtained. It is now almost an indispensable article in medical practice:

U. S. LEGATION, QUITO, ECUADOR,
January 16*th*, 1850

DEAR SIR:

The great importance which has become attached to the cinchona tree, which furnishes the Peruvian or fever bark, will excuse me for troubling you with this communication. I do not know whether attempts have been heretofore made for its propagation in the United States or not, but there can be no doubt that some parts of our country are adapted to its cultivation.

It is found in Ecuador, as well as in Peru, Bolivia, and New Granada, and its value as an article of commerce has very greatly increased during the last half century. In this country it formerly sold at $40 per hundred, while its present price is $1 per pound. (These prices are in Ecuadorian currency, to reduce which to United States money requires a reduction of about one-fifth.) In Ecuador the tree is found at elevations of from six to eight thousand feet, and where the temperature ranges from 60 to 66°. But as Humboldt observes, a comparison between the climate of these regions and others is not satisfactory, and it does not follow that the tree will not flourish in temperatures quite different. Within a few years, seeds of the tree have been sent to England and propagated in order to be forwarded to India. The plants have been forwarded thither in glass covered boxes, with what success remains to be seen. The seed is diminutive, and may be sent by post to remote countries. In northern Ecuador, and west of the mountains, and of Quito, the inferior kind is found.

The red bark variety, which is most valuable, is every where becoming scarce before the depredations of the hunters, and as no care is exercised in its cultivation, it may, after some years, unless attention is turned to the subject, become nearly extinct. The most valuable and extensive forests of the tree are found in southern Ecuador, in the vicinity of Loxa, and it is from that

quarter, so far as this country is concerned, that supplies are drawn. Information regarding the cinchona tree may be found in Humboldt's Personal Narrative, volume 1, page 138, and more particularly in his Views of Nature (Bohns Translation of 1850), pp. 280, 390, and (in note) 422.

It may be well for you to bring this subject to the attention of Mr. D. Jay Browne, connected with the Patent Office, and I should be glad to hear from him concerning it. From my position here, I enjoy peculiar facilities for obtaining the seeds of the tree, and information regarding its culture, and will be glad to act in concert with Mr. Browne, if he will take efficient steps for its introduction into the United States.

Very truly yours,

C. R. BUCKALEW.

It is stated that about double the amount of quinine can be obtained from the bark in its green state than when dried.

Pharmaceutical Department.

By T. E. JENKINS, Pharmaceutist.

ADULTERATION OF GLYCERINE.

This substance, which possesses so many valuable medicinal and mechanical virtues, comes in for its share of sophistication. It appears that, let a substance have a disposition never so sweet, it is almost certain to be polluted by the foul touch of some manufacturer or money-getting drug merchant.

Since glycerine has become an article of importance in medicine and pharmacy, and because a certain party has been skillful enough to produce a pure and dense article at a very reasonable cost, much under the prices hitherto asked for a barely passable article, others have made a factitious glycerine at a price a little lower than the genuine can be bought for. The made article can only cheat the very ignorant and careless, for the manner of detecting it is so simple and easy of performance, that almost any tyro in chemistry—certainly any doctor or apothecary—may make the test.

The adulteration referred to is the addition of any convenient or *profitable* amount of simple sirup to pure glycerine; the two substances mix readily and make a compound, which, to

the sight, taste, smell, and touch, is almost exactly similar to pure glycerine itself.

Pure glycerine can be bought for from $1 25@$1 75 per ℔ in any part of the United States.

Simple sirup can be made for about 8c per ℔ in any part of this country.

Mix 20 ℔ Glycerine at 1 50 : : : :	$30 00
With 20 ℔ Sirup at 8c : : : : : :	1 60
40 ℔ Adulterated Glycerine, : : : :	$31 60
Average cost per ℔ of : : : : :	79c.

These figures with the dollar mark before them show the incentive to action. The regard the party has for the welfare of his suffering fellow-man, can be better imagined than described. Does it not behoove the physician, whose patients' life and health, *and his own reputation*, depend greatly upon the use of pure and reliable medicines, to look to this thing?

The readiest method of detecting this adulteration is Trommer's test for sugar in diabetic urine, which is to take, say two drams of the fluid suspected to contain sugar, and mix with it a grain of sulphate of copper dissolved in a few drops of water, and add to the mixture about a dram or a dram and a half of Liquor Potassæ; it should then be slowly boiled for five or ten minutes. If sugar be present a *red* precipitate of suboxide of copper will be formed, rendering the solution turbid; if sugar be not present the precipitate produced will be the *black* oxide of copper.

Glycerine is frequently mixed with water. This sophistication may readily be known by its low specific gravity. Pure glycerine should have a specific gravity of about 1.25.

[From the London Pharmaceutical Journal.]

"STEEL WINE."

"℞. Ferri potassio-tart - - - - ℥ss.
Vini Xerici - - - - - - Oi.
Dissolve and filter.

This preparation contains nearly two grains of the ferruginous compound in the teaspoonful, and may be given thrice daily before meals.

It is said to be very effectual, and is much approved."

The above preparation is not unlike a favorite prescription of Dr. Freiderich, of Heidelburg, which is about as follows:

℞. Tinct Ferri pomat - - - - ℥i

Give half a teaspoonful thrice daily, before meals, in a little generous wine. Sometimes the prescription is modified and some preparations of bark added—thus:

℞. Tinct: Cinchon: Comp: - - - ℥ii.

" Ferri Pomat: - - - - ℥i.

M. administer as before.

The Tinct Ferri Pomat. which is a very general favorite prescription on the Continent of Europe, is prepared by dissolving in Vinous Tinct: of Cinnamon one-sixth of its weight of Extract Ferri Pomatum, an extract made by macerating with frequent stirring, an excess of iron filings in the pulp of unripe apples, and after the acidity of the fruit has been neutralized by the iron, which will require several weeks, straining and evaporating the liquid to the consistence of an extract.

T. E. J.

The Use of Sickness.—"My old nurse, Mrs. Patrick O'Toole," said cousin Jerry, "was a woman of logical mind. I was very sick once, and the Doctor left me an atrociously bitter drug, which I rather declined taking. But Mrs. O'Toole carried the day. 'It's the Doctor's orders,' cried the good lady; 'and if you don't go by the Doctor's orders, it ain't no use for you to be sick at all.'

"I swallowed the Doctor's scruples as well as my own."

Death Caused by Jessamine Flowers.—A child of Mr. Jerod, four years of age, living on the Western Branch, Norfolk county, was poisoned last summer by sucking the flower of the Yellow Jessamine. The little one died in an hour after it complained of being sick. The parents would not have known the cause of the sudden death of their child but for a playmate, who said it had been sucking the flower, which is a deadly poison.—*Norfolk Herald.*

Editorial Department.

We have attentively read the communication from "Fair Play," and have bestowed equal care upon the perusal of the Report of the Committee of the Medical Society of New York" upon "Kappa Lambdaism," and as this institution or similar organizations may not be peculiar to New York, but may have been transplanted to other latitudes, we take this occasion to express ourselves in regard to their tendencies. Enough has already been written to evince our belief in the existence of this association—to show that we do not give adhesion to the opinion advanced by the Boston Medical Journal, that the whole thing is a myth, and this pretended publication of a committee fraudulent.

It is true that the report is a weak paper, and it is also true that it gives expression to feelings of personal disappointment, and no little spleen toward those who would seem to have been more prosperous in worldly matters than the committee. Nevertheless, it is the exponent of notable truths as to the practical working of these clandestine associations, which, if we may be permitted so to express ourselves, should remind observers of the geology of our profession, that similar outcroppings in other localities indicate with great certainty the existence of similar substrata.

Every Freemason knows how difficult a matter it is to prevent his venerable institution from becoming the direct promoter of wrong; the abettor and supporter of the pretender and impostor. Sometimes he is even led to doubt whether all its noble charities are not overtopped by the countenance it seems to give to the evil-doer. Men whose want of merit is naturally followed by want of success, seek to extend their patronage by bringing social influences to their aid, and those are they who are most anxious to gain admission to associations knit together by any unusual form of obligation, that they may derive advantage and profit from its machinery. Secret societies are their especial delight, since they hope to obtain the

patronage and aid of the bonded brotherhood, and keep outsiders in ignorance as to the true element of their success. Hence it comes that more modest and worthy members of these orders frequently withdraw from their active circles, crowded out and disgusted by rampant solicitors of their corporate benefactions.

These results are prone to attend the most perfect, benevolent or social organizations. Can our Esculapian "Know-Nothings" show us that their institution has its foundation laid in deeper wisdom, or that its superstructure is freer from blemish? On the contrary we may suppose that if the solemnities which guard the doors of Freemasonry can not suffice to shut out those whose only incentive to become members is the hope of promoting their secular interests—the rush of similar expectants would fill the ranks of Kappa Lambdaism, and give complete coloring to its character.

The ostensible objects of this society are "the promotion of good fellowship among the members and the advancement of medical science." We are not acquainted with their form of obligation, and would not publish it if we were, but do not doubt that as a piece of rhetoric, it is plausible and promising; but, alas for human nature, how often do tares choke out the productions of fields from which we are pledged the largest returns.

"Fair Play" has also very happily touched upon a species of tacit Kappa Lambdaism, in his remarks upon an agreement for reciprocal consultations. This is a wrong quickly perceived and censured wherever it is practiced. Even where there is no intention to reciprocate these courtesies for purposes of self-emolument, physicians are liable to fall into the habit in consequence of social intimacy, such as springs up between members of the same school faculty. Nothing more speedily or properly excites remarks of severe criticism from the profession at large. It is Kappa Lambdaism of the worst kind, since it practices the detestable selfishness imputed to that order, without being able to plead the obligation of an oath previously compacted.

We may be allowed to instance a few other illustrations of Kappa Lambdaism.

If we see a physician seeking admission to all secret as-

sociations, political or ethical, especially if he is adroit in obtaining the dignities of office, so that he may be looked upon as a standing candidate for the moderator's chair at all popular gatherings, we are warranted in believing that he only waits an opportunity to join the Kappa Lambdas, if, indeed, he is not already one.

If we find a physician or surgeon to-day paying court to the editor of a daily newspaper, and in the morrow's issue read a most cunningly devised, but wholly *disinterested* account of the skillful patching up of some formidable defect in the animal fabric by the said physician or surgeon, or of his wonderful expertness in the alleviation of a malady too common in the land;—but if we may believe the article which sets forth his skill—common only because of the obduracy of man—common only because the benevolent writer of the article, like one of old, is obliged to exclaim "Who hath believed our report?"—if we see this, are we not right in concluding that the doctor is a practical Kappa Lambda, and that he would be glad to initiate the editor of the daily, together with all his invalid readers? If we see a company of doctors holding a role of popular offices, and annually passing them from one to another of their group, like Indian pipes of peace, without pausing to inquire by what means they achieve this end, we may fearlessly say that if secret oaths of mutual fealty would perpetuate the arrangement, they would be quickly taken.

When we see physicians of spotless professional and social character closely linked with those whose moral tergiversations are so frequent and striking that notwithstanding their good medical reputation, we are obliged to confess that they are like Randolph's "rotten mackerel by moonlight," how can we account for the unnatural coalition more charitably than by saying to ourselves, the Greek letters have wrought it.

We are unable to perform a promise made in our last number, because some of our papers have been misplaced. This is, we confess, a miserable excuse for business men, but we are not responsible for the occurrence.

Dalton's Physiology may be obtained from Messrs. Hagan & Co., Main street.

GLEANINGS FROM FOREIGN JOURNALS.

NITRO GLYCERINE OR GLONOINE.—Dr. A. G. Field, F.R.C.S., of Brighton, has repeatedly used this formidable preparation, and says that "notwithstanding the discouraging experiments of Drs. Fuller and Harley, he is convinced that it is a remedy of great potency and value."

In reference to the dose and mode of administration, he says that the solution which he is in the habit of using, contains only one per cent. of pure nitro glycerine, and he has frequently known one drop of this to produce so severe a headache that he now commences with half that quantity. He thinks that it is more certain in its action when given undiluted, than when mixed with water.

He reports some cases of headache in which it afforded immediate relief, but confesses that that malady is much more frequently aggravated by it. He is not able to distinguish the kind of headache to which it is remedial, but believes it to be that of a neuralgic character.

He reports a case in which the symptoms were somewhat tetanic, and another of severe facial neuralgia, in which its effects were marked and salutary. He advises all who intend to use it, first to test the preparation themselves. For himself, he states that unless it produces a sense of fullness and pulsation in his head one minute after having moistened the tip of his tongue with it, he discards that preparation.

A chemist, whom he had induced to taste it, thus graphically describes his sensations:

"The quantity I took was about one drop and a half of a solution containing one per cent. of glonoine. Upon taking it I almost immediately experienced a pain like pressure in the glands of the throat and the neck, which was succeeded by pressure on the temples, and headache. In a few minutes I felt faint, with a desire to get into the fresh air, and the blood forsook my hands and face, the circulation being seemingly partially suspended. With the aid of sal volatile, etc., I recovered a little, but felt sickness and pain in the bowels, which pain lasted at intervals for some days following. I can only

say the feelings produced by glonoine are not so pleasant that I am at all anxious to renew the experiment."

For the mode of preparing this article the reader is referred to No. 8, p. 257, of this Journal.

Traumatic Tetanus.—A case of recovery from this disease is reported to have occurred in St. Thomas' Hospital. A girl aged eight years, received, in falling, a slight abrasion on her knee, two weeks before admission to the hospital. The symptoms seem to have been well marked and attended with emprosthotonos. The treatment consisted in colchicum, hyoscyamus, iodide of potassium, infusion of gentian, jalap, mercury, leeches to the spine, mercury with chalk, Dover's powder, wine, sirup of iodide of iron—all within a period of thirteen days, and yet she recovered. Verily "there is a Providence that shapes our ends," etc.

Lithotomy.—A report from the principal hospitals in England, reveals the fact that during the year 1858, the number of cases had been forty-five which had been operated upon. Of these forty-two recovered and two died. One of the latter was a man aged sixty years, who had been a sufferer from stone four years. He died on the third day after the operation. The other was a man aged twenty. The stone was large and encysted, and there was much difficulty in extracting it. He died on the fourth day after the operation.

Paralysis.—A case is reported as having occurred in London from exhorbitant use of cubebs and copaiba. Recovered by use of electricity.

Chloroform and Aconite in Neuralgia.—Dr. Guenean de Mussy, writing particularly of facial neuralgia, "Applies it directly to the gums of the side affected, where numerous divisions of the fifth nerve are most superficial. When the neuralgia is idiopathic, i. e., unconnected apparently with any organic disease, the formula is 2 parts of Spts. of Wine, or Eau de Cologne, 1 of chloroform, and 1 of Tincture of Aconite; the

finger covered with a piece of lint or soft thick linen, is dipped in the mixture and rubbed gently against the gum for a few minutes. I do not use a sponge, because it would take up too much of the liquid, which, by pressure, might drop into the mouth."

From this remedy, thus applied, he has always derived almost immediate and considerable relief, and sometimes a complete and permanent cure.

Castration in Epilepsy.—A paper was read by C. Holthouse, Esq., on this subject, before the Royal Medical and Chirurgical Society, founded upon the operations of Drs. McKinley and White, of Tennessee; Dr. Talbot, of Missouri; Dr. Hacker, of Louisiana; and Dr. Holly, of Germany—whereupon much discussion was elicited evidently, and we think justly opposed to the operation.

In the course of this discussion, Mr. Hale Thompson remarked that "He had heard more false logic in the paper than he had ever heard in the Society before; and he suggested whether it would not be better to follow the rules of practice laid down by eminent surgeons in this country, rather than adopt ill understood American eccentricities."

We think it would decidedly, but still respectfully submit that Mr. Thompson displayed bad judgment, and worse taste, in thus alluding to the opinions of a few individuals.

Mr. Holthouse thus concluded his reply: "It was said that the removal of a healthy organ was not justifiable. Nor would he justify it in a healthy individual; but in cases of disease it was sometimes necessary, as in amaurosis, which had been cured by the removal of healthy teeth. If the teeth might be removed to save the eye, he did not see why the testes might not be removed to save the brain."

We see great objections to the argument of Mr. Holthouse, and can not concur in his opinion, but we do not hence pronounce that opinion a British eccentricity, nor do we consider the conglomerated treatment of the case of traumatic tetanus at St. Thomas' Hospital a British eccentricity.

Whooping Cough.—A letter from Harvey A. Hall, Surgeon Accoucheur to the Royal Pimlico Dispensary, states that the writer has seen marked and speedy benefit from the application of one or more blisters, from the size of a crown piece and upwards, according to the age of the child, to the back of the neck, as high up as possible in the hollow between the insertion of the extensor muscles, and encroaching a little upon the scalp. The blister should be removed after four or five hours, and a warm linseed meal poultice applied. The effect of this mode of treatment is to lessen the convulsive character of the cough within twenty-four hours, sometimes to suppress its spasmodic character entirely. The more convulsive the cough, the more marked the effect of the blister; but in bad cases it is necessary to repeat the blister when the first has healed.

Mr. Hall says "He has now treated a considerable number of cases on this plan, and in only one instance has the blister failed to produce decided benefit; but in this case, on a second blister having been applied, the mother reported at her next visit that the child had been "very much better ever since." His constitutional treatment is simple.

Coryza.—M. Monneret having used successfully the subnitrate of bismuth in acute coryza, Dr. Sabrier added thereto the iodide of sulphur, and asserts that thereby a cure for chronic coryza is obtained.

The following is his formula: Subnitrate of bismuth, 4 parts; liquorice powder, 8 parts; iodide of sulphur, 30 parts. Of this compound the patient is to take ten or twelve pinches in the day, according to their effect. It is used as snuff, and called bismuth snuff.

Rupture of the Heart.—W. O. Markham, M.D., Physician to St. Mary's Hospital, details an analysis of cases contained in the Transactions of the Pathological Society, excluding those from traumatic causes. Twelve cases of spontaneous rupture on record. In eight of these the subjects of the disease are said to have suffered from symptoms, either of disordered circulation or respiration, or both, prior to the occurrence of the rupture. Two had suffered previous attacks of hemiplegia,

and in these two, intra-cranial diseases were found after death. Two only are reported to have enjoyed good health. Seven of these occurred in the male and five in the female. The average age of the sufferers was about 68 years; the youngest was 52, the oldest 79.

Editors of the Medical News:

GENTLEMEN,—The following little communication was prepared some time ago with a view to publication in one of our secular journals, in consequence of certain professional improprieties then observed, which, in the opinion of the writer, deserved some such exposure.

Lately his attention has again been called to the subject by the perusal of a report made to the Medical Society of the City and County of New York, developing a scheme of vicious copartnership on a more extensive scale than any contemplated by our British Reviewers.

It seems that many years ago a number of physicians in the city of New York formed themselves into a Society under the name of the Kappa Lambda Society of Hippocrates, ostensibly associated for social and scientific purposes, but really for the promotion of the personal interests of its members, by means of the concerted and furtive action of the body. For a while the Society itself became as secret as were its plans and agencies, but intruded itself into respectable professional company a year ago by sending a delegate to the American Medical Association at its meeting in Washington. This impertinence provoked an exposure in the republication of the report just referred to, which was originally made by a committee of the Medical Society of the County and City of New York, and approved by that body of some three hundred physicians.

The report shows that the Kappa Lambda Society is a veritable *conspiracy*, detestable in its purposes, and unprincipled and base in its modes of accomplishing them.

The presence of this latent, corrupt and corrupting influence in the bosom of the medical community of New York will go far to explain the inferior position and character which that body of physicians, with an abundance of individual merit

among them, has maintained, compared with their brethren of Boston or Philadelphia.

The comparative failure of institutions for medical education there—the perpetual intrigues that agitate and distract the medical public—the flagrant derelictions of its members that go unwhipt of justice—the inexplicable and harlequin appearance of professional success and reputation in that city—all these things that have been observed among New York physicians, with equal surprise and regret on the part of their medical brethren elsewhere, may be accounted for by the pernicious operations of this clandestine association.

Let us hope that the comment of one who appears to have investigated the subject, with a proper appreciation of its mischievous tendencies and effects, is well founded—at least, so far as it relates to our own community, "it is found no where but among medical men, *and only in New York.*"

I remember reading, with much interest, in one of the British periodicals, an elaborate article on the subject indicated in the above caption, which constituted the title of the essay.

The subject promised little that would be interesting to the reader of a magazine, but I soon found myself engaged in a production of one of the ablest of the contributors to that wonderful group of monthlies that, for the last half century, has constituted a leading characteristic of British literature. The writer, after presenting a number of examples of such vicious co-partnerships as at that time existed in most of the populous States and cities of the world, proceeded to expose their pernicious character, and the various ways in which they facilitated and concealed false pretences, extortion and an infinite variety of smaller and greater frauds. Altogether the article was a masterly exposition of one of the most dangerous and least suspected modes of imposition with which the ingenuity of our age—very prolific in such arts—has cursed society. The essential vice, in all these reprobated associations, was shown to be *concealment*, and the writer inferred, from the mischievous tendencies of this element, a vindication of the policy of English law. I believe the same feature is common to the statutes of most of our States respecting partnerships, which requires public advertisement of mercantile partnerships, together with

such an exhibition of names, capital, etc., as to put it out of the power of the party to profit by concealment.

Notwithstanding, however, the thorough and comprehensive manner in which the article was prepared, it contained no reference to one example of vicious co-partnership lately brought to my attention, which seems to me one of the most objectionable and offensive forms which the evil can possibly assume. It is said that physicians sometimes have a private understanding, as it is called, but really a co-partnership, with a view to a reciprocal profit by consultations. Two medical men, who have obtained to something like equal practice and reputation in the community, will agree that, whenever one of them is engaged in a case where a consultation is required, he will use his influence to have the other called, and "vice versa." The slightest reflection will suffice to show what revolting impositions may be the result of such *understandings*. A member of a family is extremely ill—the anxiety of friends, or, perhaps, the perplexity of the physician, suggests a consultation. In the fullness of confidence in Dr. A., the family physician, he is requested to solicit a counsellor, in the expectation that he will propose some one of acknowledged professional authority, or some one whose course of experience had been supposed to make him specially acquainted with the form of disease to be treated, or, perhaps, some one who, on former occasions, or by some means had become acquainted with the constitutional peculiarity of the patient; but not expecting him to abuse such confidence, to the profit of his private co-partnership, and summon Dr. B. according to engagements entered into before the present case of disease or any of its special exigencies could ever have been anticipated. Dr. B. may be a very proper person for the occasion, but he has been very improperly introduced, and they may have been cruelly imposed upon, whose confidence, made doubly sound by the circumstances of suffering and anxiety in which it was reposed, has been valued no higher that a consultation fee. Do any such vicious co-partnerships as these exist in our midst? I hope not.

FAIR PLAY.

Dr. Miner mentioned the case of a person who had swallowed an ordinary pin, which came out at the knee six months afterwards.—*Buffalo Med. Jour.*

Dislocation of the Head of the Femur into the Obturator Foramen, in a child two years and three months old. Reduced by Reid's Method. By Chas. A. Bowen, M.D., St. Catharines, C. W.

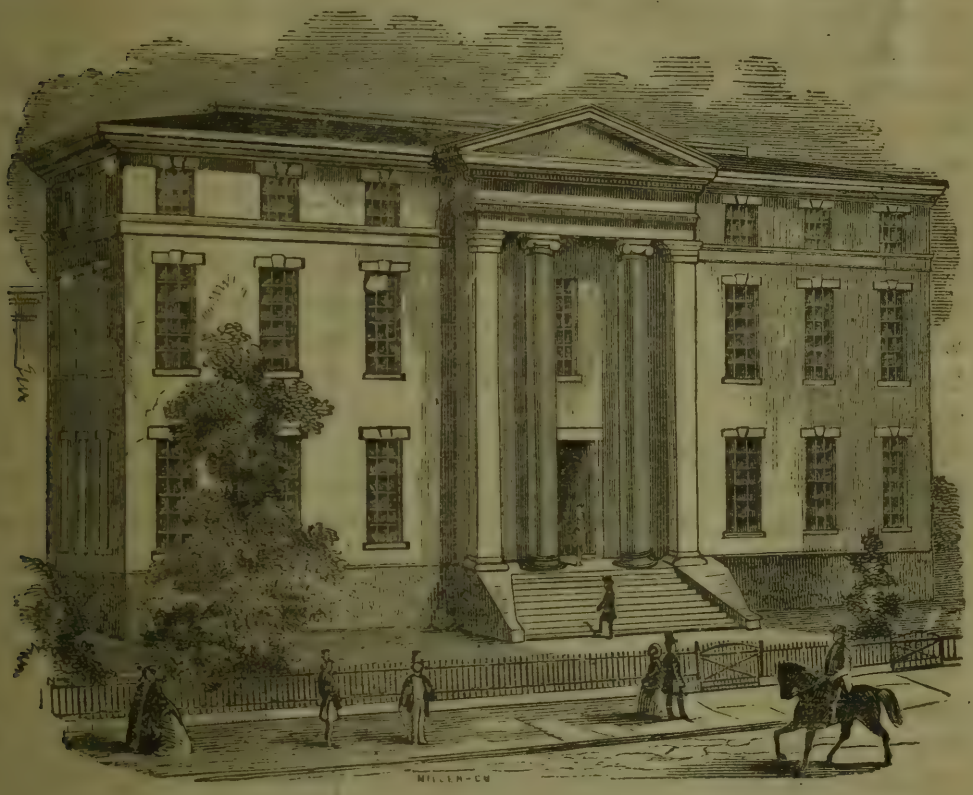
Mrs. J., on the 3d of December, 1858, being in a bad humor with things in general, and her child in particular, a little girl two years and three months old, saw fit to pull it violently from where it was sitting, on the floor, by its right leg, and then give it a severe application with her hand, *a posteriori*. As the baby did not cease crying the moment she left off beating it, (which all sensible babies ought to do, no matter how hard or many the slaps), she caught it by the shoulders, and thumped its gluteal region violently against the seat of a wooden chair, with much force. About half an hour after this *interesting* proceeding I was called to see the child, and found the little sufferer on a woman's lap, moaning most piteously; I asked the woman what was the matter, to which she replied, that the mother had broken one of the baby's legs, as it was longer than the other, and she could not stand on it. After making a careful examination of both inferior extremities, I satisfied myself that the head of the right os femoris was resting in the obturator foramen. The knee was bent, but capable of extension, and when I placed the two legs side by side, the right was about three-fourths of an inch the longer. The foot pointed forwards, and the toes could be inverted or everted, apparently without much pain. The usual flattening of the hips was present, and as the child was rather thin, I could feel the empty acetabulum through the super-imposed tissues. There being no doubt as to the position of the head of the femur, I proceeded to reduce the dislocation, after Dr. Reid's method. Placing the little subject on a table, (the pelvis being steadied by an assistant), I put my left hand over the seat of dislocation, and grasped the knee with my right, carrying it up and across the opposite thigh, as high as the umbilicus. The knee was next pressed towards the abdomen, to throw the head of the femur out of the thyroid notch, and then shoving up with my left hand, I carried the knee somewhat to the right side, and suddenly straightened the leg. The first and second attempts were alike unsuccessful, but on trying the third time, and using a little more force, I had the satisfaction to feel the head of the bone slip in with a palpable jerk. The child would not put its foot to the floor for the first two weeks, nor did it commence to walk until four weeks had elapsed, and then only a few steps at a time.

It is now eight weeks since the accident, and the little one is running around as well as ever.—*Buffalo Medical Journal.*

MEDICAL DEPARTMENT

OF THE

UNIVERSITY OF LOUISVILLE.



Announcement for Session of 1859-60.

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ANNOUNCEMENT FOR THE SESSION OF 1859–60.

The Board of Trustees have the pleasure to announce that the Medical Department of the University of Louisville will enter upon its Twenty-third Session on the first Monday in November, directed by an efficient and energetic organization. A Preliminary Course of Lectures will be delivered at the University and Marine Hospital, free of charge, and will be commenced on the first of October. The Dissecting Rooms will also be opened at that time. The Session will close as heretofore, on the last of February.

CLINICAL MEDICINE AND SURGERY.

Especial attention will be given to practical Medicine and Surgery, and while we would avoid any exaggerated estimate, either of the importance of clinical instruction, or our resources for affording that instruction, we would still urge the fact, that our increased arrangements in this regard, are such as will keep constantly before the class, patients illustrating almost every form of disease, and this independently of the City Hospital, to which also students have access without cost. Clinical lectures are delivered in the amphitheater of that institution twice weekly during the whole session. A large number of patients may there be seen, and the progress of their diseases, and the action of remedial agents observed.

The University clinique, which last session afforded so many instructive cases, and presented students an opportunity of witnessing many interesting and important surgical operations, will be continued as heretofore, but with increased facilities and attractions.

PRACTICAL ANATOMY.

The facilities afforded by the University for the study of Practical Anatomy are unsurpassed. The Dissecting-rooms are arranged so as to afford abundant accommodations for the classes, and the supply of subjects is ample. The Demonstrator of Anatomy, aided by competent assistants, devotes the evenings to the instruction of the students engaged in dissections, and the interest felt in this branch of medical education is evinced by the assiduous attendance of a very large proportion of the entire class upon the labors of the Dissecting-rooms.

We can safely assure students and physicians who desire to study this fundamental branch, or renew their acquaintance with it, that for comfort, convenience, cleanliness, ventilation, and amplitude of space, the University offers inducements to the anatomical investigator which are not excelled in America. Every effort will be made to attract students to an appreciation of the importance of a knowledge of Practical Anatomy, and render their pursuit of it a pleasant duty.

FEES.

The fee for admission to the entire course of Lectures is One Hundred and Five Dollars, payable, as are all the fees, in advance.

The matriculation ticket gives the student the use of the extensive Library of the Institution during the Winter, and is Five Dollars.

The graduation fee is Twenty-five Dollars. The fee for admission to the Dissecting Rooms and for instruction by the Demonstrator of Anatomy, is Ten Dollars.

REQUISITES FOR GRADUATION.

1. The candidate for the degree of *Doctor of Medicine* must have attained the age of twenty-one years, and sustain a good moral character.

2. He must have attended two complete courses of Lectures, the last of which shall have been in this Institution.

3. He must also have taken the ticket of the Demonstrator one session, or been engaged in dissections under a competent teacher; and must have attended one course of clinical instruction in the Louisville Marine Hospital, or in some other institution approved by the Faculty.

4. Students who have attended a full course of Lectures in a respectable medical school, and physicians who have been engaged for four years or more, in reputable practice after a regular course of study under a preceptor, are admitted to examination in this school after attendance upon one complete course.

5. Candidates, at the time of applying to the Dean for admission, are required to exhibit their tickets, as proof of their compliance with the above rules, and to produce a thesis on some medical subject, composed by themselves. In the event of withdrawal or rejection, the thesis and graduation fee will be returned to the candidate.

6. The voting on the case of each candidate is by ballot, and if there be three negative votes he will be rejected, the Professors of Clinical Surgery and Medical Jurisprudence and Sanitary Science, not voting.

The Janitor will be in constant attendance at the University, on Chestnut street, between Eighth and Ninth streets, and will be prepared to give students any information in reference to Boarding Houses, etc., on their arrival.

Gentlemen desiring further information, may address

J. W. BENSON, M.D.,
Dean of the Faculty.

Semi-Monthly Medical News.

VOL. I. LOUISVILLE, KY., JULY 15, 1859. NO. 14.

RESUMÉ OF THE COLLEGE CLINIC, AT THE UNIVERSITY OF LOUISVILLE, *delivered by* DAVID W. YANDELL, M.D., *February* 19, 1859.

Gentlemen:

I have thought that I could not better occupy the hours that remain to us of the course, which another meeting will close, than in recalling, in a brief and practical way, a few of the more interesting cases of disease which have been, at one time and another, before you in this amphitheater. Such a retrospect cannot fail to be profitable to you.

In the recapitulation of our labors, I will follow the order in which the cases were presented to you.

Onychia Maligna.—I objected, you may remember, to the term "malignant," in connection with a disease which presents none of the characters of true malignancy. Simple onychia, or onychia in its milder forms, is not necessarily a disease with which the constitution has any thing particularly to do. The more obstinate and distressing variety of the affection I have never seen, except in delicate, strumous children, or in persons suffering with other diseases. Our patients were both boys, aged respectively 5 and 8 years. The cause with one was a bruise inflicted by a stone. The other boy was paralytic in the diseased limb. In the first case the progress of the disease was rapid. Blood was effused under the nail; then inflammation, suppuration, and ulceration of the matrix, with loosening and separation of part of the nail from its bed. When you first saw it, the toe was enormously swollen; of deep red color; the nail broken up into pieces; the entire matrix ulcerous; the surface greenish, and here and there black; edges raised, callous, white; discharge bloody, profuse, thin, fetid. The pain was very great; the boy could not bear his toe to be touched; there was great irritation of the general system; he was unable to sleep; prevented by the condition of his toe, from exercise; was thin, pale, sallow. Dupuytren

tells of a case of onychia which was treated for gout. You could hardly have made such a mistake in this case. The boy got well in good time by a treatment which I can recommend to you, where the destruction of the nail has been so complete and thorough as to prevent its acting as a foreign body, and consequently requiring no operation for its removal. It consists in the internal exhibition of the potassio tartrate of iron mixture (one ounce to six), a teaspoonful three times a day, and the application to the toe of lint saturated with a solution of about the thickness of cream of the aqueous extract of opium. The dressings, from the small amount of water used in dissolving the opium, incline to become rapidly dry. To obviate this it will be necessary to direct that they be frequently moistened with tepid water. The boy had a comfortable night after the first application. He was allowed generous diet; was ordered warm clothing; told to spend much of his time in the open air, when the weather would allow. In three weeks he was cured, it having been necessary to tear away but two fragments of the nail, neither of them so large as a pea.

The other case I called *onychia simplex*. It resulted from the pressure of a tight shoe. The nail was here evidently the main cause of the trouble, and required to be removed. Dupuytren proposed a very severe though very effectual operation for this purpose. Since, in this instance, there were several portions of nail which it was necessary to remove, and a large amount of diseased surface which it was important to reclaim, I did not cut with a sharp, straight bistoury in a semi-circle, above the root of the matrix and around the sides, and then, with forceps, raise the edge of the integument, and cut thence under the matrix to the end of the toe, as Dupuytren did, but I effected the same thing by the application of Vienna paste. And instead of covering the part with lint perforated with holes, and spread with cerate, and enveloping this with dry lint, and keeping the whole closed for five or six days, as the illustrious Frenchman advised, I ordered the same dressing as in case number one, with the addition of more frequent applications of warm water. This boy had, in other respects, the directions and medicines given to the first patient. In ten days he was cured.

Varix.—You will remember to have seen seven cases of varix. Under this term I have been in the habit of including every stage of phlebectasis of the saphena, from the slightest unnatural dilatation of these vessels, up to actual disorganization of their structure. You are aware that the venous circulation of the limbs is obstructed by prolonged or violent muscular contraction by compression of their larger trunks in

the abdominal cavity from morbid or other growths, the force of gravitation in dependent parts; but more than all these sources put together, is sub-acute or chronic inflammation the cause of that relaxation and bulging of the walls of the saphena which is called varix. Rokitansky says, "Acute inflammation relaxes, dilates, and paralyzes all the coats of a vein. Chronic phlebitis produces dilatation, varicosity, and thickening." I did not discuss the comparative influence exerted by mechanical and constitutional causes in the production of varix. In the large majority of cases the union of the two seems to be required for the production of the disease. Nor did I allude to the ingenious suggestion of a Bristol surgeon, who thinks that the falciform edge of the fascia lata at the saphenous opening, in some cases constricts the trunk of the saphena as it passes downward into the femoral vein. In five of the cases shown you, chronic phlebitis, arising from different causes, was chargeable with the dilatation. In one, the phlebitis was acute and traumatic; in one, the patient gave cramps as the cause. You know that the veins of the leg are sometimes ruptured by cramps. Two of the patients were females. Dr. Meigs teaches, and I think with reason, that dangerous crural phlebitis occasionally takes its rise in women after confinement, in this diseased state of the veins of the leg. A little attention to females before confinement, who suffer from varix, may save you the occurrence of such a disaster. I neither tied, nor transfixed, nor obliterated, nor cut the varix in any of the cases, and yet you were witnesses to the apparent cure of five, and the great improvement of the remaining two patients. Before the expiration of another four months, these two will also, I believe, be cured. They were all treated by compression, effected in some cases by adhesive plaster, in others by gum-elastic bands, in others by buttons, or graduated compresses, laid here and there along the course of the veins, and over these dressings, wet strips of linen or calico, as suggested by Dr. Chapman, of London, in his work on Varicose Veins, and finally enveloping the whole limb in a flannel or cotton roller.

You must not conclude, because I have mentioned Dr. Chapman's name in this connection, that the credit of the use of these most powerful agents, pressure and cold, in the treatment of varix, is due to that gentleman. It belongs, I claim, to our own distinguished American surgeon, Dr. Benjamin W. Dudley, whose writings and teachings on this subject are familiar to that generation of physicians in the valley of the Mississippi, which, like himself, is so rapidly passing from "sunshine to the sunless land."

Ulcer of the Lower Extremities.—I have shown you twelve cases of Ulcer of the lower extremities. In two cases, the

ulcers were upon both legs; in two, there were two ulcers upon one leg; in ten, the disease was associated with varix. In one case the ulcer followed upon an attack of typhoid fever; in one, upon prolonged malarial fever. The greatest age attained by any one of the ulcers was seventeen years. There were others that had remained open for five and six years. The only two that were recent were in the fever patients. It is needless here to repeat the description I have already given you of the external characteristics of this affection. When the older teachers in this institution were, as you are to-day, students of medicine, they were taught that it was unsafe to heal these ancient sores without establishing in some way or somewhere a temporary counter-drain. All manner of evils were said to attend upon the sudden shutting up of the accustomed discharge from suppurating surfaces. In a single case we have found this to be the fact, and it is so remarkable that you must permit me to recall it. It was in the person of an old man, who had been for many years the subject of epileptic seizures, who uniformly experienced an aggravation of the epilepsy whenever the ulcers had been much diminished in size by treatment. His attacks as invariably dropped back to their ordinary stated intervals, when the ulcers were suffered to spread to their original limits. He, alone, of all the cases treated, has passed through the winter without being cured. Nor were we obliged either to establish any counter discharges, as I have said was so long held to be the safer practice. Nor did I find it necessary to amputate the limb, as has been done; nor, on the other hand, to cover, as my friend Dr. Hamilton of Buffalo has practiced, the ulcer with a portion of the neighboring tissues; nor did I apply the actual cautery, as I have seen done in this city; nor did I blister either the surface of the ulcer or its edges; nor did I apply adhesive plaster with collodion, nor glycerine, nor charcoal, nor the electric moxa, nor either a vegetable or mineral caustic; not even so much as the tincture of iodine; nor did I incise around the ulcer, nor cut the edges of the ulcer away. I ignored all salves, unguents, and poultices whatever. Neither did blue pill and black draught play any part in the cure of these eleven cases. The "secretions" were not even asked after. I actually resisted the blandishments of the hypophosphites and turned a deaf ear to the potash trio, the chlorate, hydriodate, and permanganate. Water, neither hot nor cold, touched an ulcer. Nor was a single patient confined to bed for a single day. The treatment, from beginning to end, with a single exception, consisted in the application of the roller, and the internal use of the opium and soap pill.

The exception alluded to was that form of ulcer known as irritable; and this was dressed with a pledget of lint dipped in chloric ether, over which the bandage was then applied. This, you will remember, produced a sharp pain, which, however, lasted for but a few moments, and the patient enjoyed, what he had been long without, a comfortable night. I need not tell you that though these several patients were many times before you, I was always exceedingly careful in the manner in which I applied the compression. I always asked whether the bandage *cut* any where, and, if so, I removed it and applied it with additional care. I told you then, as I repeat now, that there are few operations in surgery which require more patient, painstaking practice than the application of a bandage to the leg, that all parts of the limb may receive equal support; without which, instead of effecting cures, you will actually do more harm than good.

Spermatorrhœa.—You will not forget seeing two cases of Spermatorrhœa. Both patients were from the agricultural districts, and it is remarkable how large a proportion of such cases are from the country. It is not necessary for me to repeat what I then said about either the causes or consequences of this distressing affection. I recall these cases now, for the purpose of warning you, more than any thing else, against the use of caustics for their relief. For once, at least, step out from the beaten track, and throw, not physic, but urethral porte-caustiques to the dogs. Have none of them. I venture that the cases you will encounter will seldom differ from those you have seen here, and in the relief of these, neither Lallemand's instrument, which certainly is a villainous one, nor Dr. Hoit's modification of it, which is not much better, was uncovered. The truth is, gentlemen, that the physiology of generation has been studied at the expense of the pathological condition of the organs concerned in that function, and I am free to assert that there are few diseases which, as a general rule, are so barbarously treated as those affecting the genital organs of the male. The first of our patients with spermatorrhœa confessed to having had caustic applied to his urethra more than a hundred times. The second patient had gone the rounds, from regular to charlatan, for month after month, and yet neither had been in any respect benefitted. One walked a hundred miles to see me, and believed, when he reached here, that he would never live to get home again, such is the depressed condition of the mind in this disease. You will remember that one of the first things that I did, was to secure some of this "life blood," as the Pariahs have it, that was being lost at such a fearful rate. This I submitted to the microscope, that unerring analyst, and what did I show you? Any

of the germs from which man springs? Not one. But merely a milky fluid, consisting of mucus, water, and phosphate of lime, and without a trace of spermatoza in all of it. In other words, these half witted countrymen were, in the language of the advertisements, "being destroyed, body and mind," by the loss of a fluid which was not testicular at all! Are you not aware that some unfortunate men have actually cut their testes away because of seminal emissions, which still persisted after the supposed offending organs were gone? Now, I ask you, if castration will not secure an unfortunate patient against seminal losses, do you think that the introduction of nitrate of silver to some undefined "sensitive spot" in the urethra is likely to do it? When you meet with spermatorrhœa, correct the dirty tongue, unload, and keep continually free, the primæ viæ, never allow your patient to lie down at night without having had a good alvine discharge during the day. Direct him, if his losses occur only at night, to sleep in an airy room, upon a cool couch on his side, and at whatever hour he wakes in the morning, to get immediately up; not to trust himself to the "delicious second nap;" not to fold his arms to "a little more sleep," for during this is the time of greatest danger. Order him a daily dash on horseback of five miles at a rattling gallop, and on his return some manner of cold bath; best, a plunge or shower bath. If he can't afford a horse, let him take it afoot. Give him, internally, citrate of iron and quinine, or citrate of iron and strychnine, or strychnine alone. Forbid him coffee and tobacco in all its forms. Enjoin early hours, and advise matrimony. I need not add that both of these unfortunates were entirely cured.

A few of the older pupils here present will remember to have seen me treat two or three spermatorrhœa patients by a seton in the perineum. I believe they would have recovered as rapidly without it.

Sparganosis.—The time when abscess in the mammæ of nursing women was treated by venesection, leeches, emetic tartar, mercurials, "*et id omne genus*," has, happily for the sufferers, gone by. Wine, bark, iron, perhaps salines, have taken the place of the more heroic, but less humane, means of cure. The two cases of this affection which I brought before you, were treated by methodical compression of the gland, effected by means of adhesive strips. I preferred to make the compression after the manner suggested by Dr. Gilmour, rather than that of Trousseau, as being both, less expensive and attended with fewer inconveniences to the patient. I used bands of plaster, one inch broad, and long enough to pass, on the one hand, from a point opposite the gland behind, to midway the sternum in front; on the other from four or five inches

below the mammæ to the clavicle. I first applied one sett, allowing each strap to overlap the other about one half. Nicking out sufficient space for the nipple, I then began with the perpendicular straps and so on to the end. I cannot but believe that if you will apply this dressing as you should do, you will find it immediately diminish inflammatory engorgement, and greatly mitigate if it does not wholly relieve pain, and, if the abscess be opened, that it will both favor the discharge of its contents and curtail suppuration.

Eczema.—The clinic, during the winter, has been rich in examples of eczema in children. I hardly know how many cases of this affection have been exhibited to you. You have seen it occupying the head and the face, the arms and the trunk, now almost universal, again quite circumscribed. In some instances the disease has been quite recent, in others, of longer standing. In some the vesicles still retain their fluid contents, in others, these contents were spread about as crusts or scabs. The mothers of the children all agreed that their little charges were most restless and most disposed to scratch themselves at night, and some nights more than others. About one half the cases were cured by the plan which Mr. Erasmus Wilson believes almost infallible in infantile eczema, to-wit: one or two grains of calomel, according to the age of the child, for a night or two, to be repeated afterwards on those nights when it was fretful and peevish; one or two drops of Fowler's solution, morning and evening, thorough cleansing of the parts with poultices and warm water, and the application of the simple or benzoated oxide of zinc ointment. The other half were treated with the sub-carbonate of soda lotion, of the strength of half a dram to a pint and a half of water. Now many of this latter half returned again and again, and why? Simply because the mothers did not apply the solution as they had been ordered. They put it on from time to time. This never proves of any great service. Now I beg you to bear in mind, that alkaline lotions to be useful in these cases, must be kept *constantly* applied to the parts. The moisture contained in them seems to me almost as important as any actual medicinal property they may possess. Place lint saturated with the solution, over the eruption, and cover this with oil-silk. This dressing protects the parts, removes the exudates, and thereby prevents incrustation. In so far as the alkaline lotions require more frequent repetition, and more constant care, and are more difficult to keep in place, I prefer the zinc ointment. Nor am I able to see that in any particular not named, the aqueous solutions possess any advantages over the unguents.

Granular Eyelids.—You saw seven cases of granular lids.

In one, that of the poor man from Texas, the disease was of such duration, that the entire surface of the globe of the eye had been involved in the inflammation and its consequences, and vision was totally destroyed before he reached me. I need hardly tell those of you here from Texas that inflammations of the conjunctiva are very common, and, I hear, very intractable in that State. The boundless prairies, the wide expanses of sandy land, the prevalence of violent "northwesters," the sudden atmospheric changes, are sufficient to explain this circumstance. The application used in the treatment of four of these cases, was the sulphate of copper in crystal. Desmarres prefers for this purpose a piece of the sulphate as it is found in the shops, rough and ragged. I myself rub the crystal down with sandpaper, and afterwards polish it with a wet rag. If this is not so efficient, it is, at least, a more humane mode of applying it. You observed that in those cases in which the redness and congestion of the lid were greatest, I first scarified with a very sharp knife the palpebral conjunctiva, and encouraged the flow of the blood by the continued use of warm water. I then touched the whole of the conjunctiva, lining the upper lid, as far as I could reach, and especially in the corners of the eye, with the copper. I continued it, you will remember, at each sitting, until the mucous membrane was somewhat whitened by the action of the salt. Before letting go the lid, I directed upon it a stream of water, as hot as could be borne, and then wiped the cauterized surfaces with a piece of the softest sponge. When the lid was returned, the patient was directed to bathe the parts for some minutes in hot water. I say *hot* water, because water, either cold or warm, has much less control over the pain produced by the application of sulphate of copper to the eye, than water applied at as high a temperature as can be borne by the parts. The patients bathed their eyes several times a day in salt water, a tablespoonful to the quart. They were each provided with a few drams of wine of opium, several drops of which they were told to let fall into the eyes, morning and evening; and this they continued to do for weeks after the copper had done its work and been laid aside. In two patients who were very timid and sensitive to pain, I substituted for the sulphate in crystal, a solution, composed of wine of opium six drams, water two drams, sulphate of copper two grains, and everting the lids, applied this freely with a brush, once or twice a day. The profession is indebted, I believe, to Wharton Jones for this most excellent wash. People who carry granular lids are generally below par in health, and need steel, generous diet, out-door exercise, flannel, and quinine.

Purulent Ophthalmia.—Two cases of Purulent Ophthalmia oc-

curring in new born children, were shown you. The cause of the disease in one was a filthy state of the genitals of the mother. In the other, the prolonged exposure of the child's eyes to a bright light. Both were treated and speedily cured by first cleansing the eyes with tepid water, and then rubbing both the upper and lower lids with the sulphate of copper. You will hardly have forgotten that I said to you, that this was not the *only* local application in this form of ophthalmia, but my own experience has led me to place a very high, not to say the highest, estimate upon the copper under such circumstances.

Phlyctenular Ophthalmia.—You will not soon forget the four cases of Phlyctenular Ophthalmia that have been shown you. The symptoms of this affection of the eye are so striking, that having once seen it, you need hardly again ever mistake it. It is emphatically an eruptive disease. It seizes upon the conjunctiva, not as a mucous membrane, but rather as a continuation of skin over the eye. The four patients were all between two and eight years of age. This is the rule. In one case there was scarcely any redness of the eye, and yet the intolerance of light, the spasmodic contraction of the eyelids, and the epiphora were as great as in those cases in which the phlyctenulæ were numerous and well developed. I gave you two explanations of this. One was, that the sensitive nerve of the eye, being excited, produced reflex action of the portio dura; the other was, that the retina was involved, producing reflex trouble of the orbicularis palpebrarum. I confessed myself unable to explain the evening remission which is so marked a peculiarity of this disease. I warned you that no disease was more apt to relapse, and advised you to give a very cautious prognosis. I spoke much less confidently of remedies in phlyctenular, than I did in any other form of ophthalmia. I held in regard to it, very much the same language that I used when speaking of some cases of inflamed glands in the necks of two or three scrofulous children you have had before you. No man can tell either the duration or end of either such an inflamed gland or phlyctenular ophthalmia, and yet, properly directed remedies may do a great deal towards the cure of both affections. I have only time to add, that the treatment was uniformly opened by unloading the alimentary tube, and a soluble state of the bowels was maintained throughout, by the exhibition of that favorite remedy with me in diseases of children, rhubarb, then quinine, iron, flannel, meat, exercise in the open air, salt water baths, followed by frictions, made up the bulk of the constitutional means. Thorough protection of the eye from light, fomentations with the extract of belladonna, painting the lids and brow daily with the tincture of iodine, the red precipi-

tate salve, eight grains to the ounce, to the palpebral edges at bedtime, several drops of a solution of the nitrate of silver, four grains to the ounce, constituted the local measures. The tincture of iodine is a most precious remedy for the photophobia, only be careful that none of it gets into the eye. And yet, you know, the mother of one of our little patients actually dropped the iodine, instead of the silver, into her child's eye, and declared it was the better remedy of the two. The case certainly made the speediest recovery, but I say, stick to the silver until further notice.

Sciatica.—By the term Sciatica, you have been taught to understand a painful condition of the great nerve of the leg, as it emerges from the pelvis and passes on down the limb. You have had an opportunity of seeing two cases of this often most obstinate and intractable affection. One was in the person of a poor woman, terribly shattered in health by the pain and cause on which it depended, who was sent to me from Green River. She had been living in a malarial district, had suffered from a long attack of remittent fever, and when you first saw her, was the picture of feebleness and exhaustion. She could sleep none, and ate none, and was unable to walk. Suppose now this poor, pale, bloodless female, had been subjected to that routine practice which was so much the fashion in sciatica some years ago, and had been ordered a rattling dose of croton oil. Do you think it would have been good for her? She had, instead, quinine, wine, iron, and, as it was during the "pork season," spare ribs and tender loins. She improved from the jump, and got well straightway. Sciatica in the other case, was in quite a different individual, and proved itself quite a different affair. This time it was in rather a stout looking man. He, poor fellow, had croton oil until he was made as empty as a drum. No matters that were removeable at least, were left in his pelvic viscera to impinge upon the nerve. He got alkalies till he must have been completely neutralized, and yet the nerve-pain did not budge. He took quinine in dram doses, the carbonate of iron ditto, the hydriodate of potash ditto, belladonna till his irides were lost behind the margin of the scleroticæ, Indian hemp until his visions were as wild, if not as beatific, as the most devout pagan could have desired. And then he had liniments, and embrocations, and all manner of endermic applications of the most approved kind, not excepting Arnott's frigorific mixture. Prickly ash, poke root, colchicum, guaiacum, sulphur, turpentine, were all tried freely and pertinaciously, but to no purpose. And why? Because the sciatica was due to compression of the nerve by a fluid within its sheath. At least I thought so. And for what reason? Because the pain was of

a dull, aching, and benumbing character. The patient was unable to move the limb, and said it felt all the time as if it were swollen. This form of sciatica I never saw yield to any treatment, except that which was directed to the diminution and removal of the fluid which lay along and around the nerve. You will remember that our patient, from some ignorant and unexplained prejudice, resisted all our entreaties to allow either a cut, or a blister, or a leech, or any other thing, which, as he expressed it, would break the skin. I really believe that if he had permitted us either to puncture alone the sheath of the nerve, or to puncture and throw into it some powerful sedative, as a strong solution of morphine, for example, he might have been relieved. As it was, after running over the frightful gamut that I have named, without benefit, I counselled our dernier resort in such cases, a winter in the Tropics.

(To be continued.)

OUTLINES OF CLINICAL CASES.

BY S. M. BEMISS, M.D.

Among the many cases of different forms of disease which were brought before the class by the clinical teachers of the University during the past session, were some in whose progress and results so much interest was manifested by the class that a promise was made to give their outlines in a permanent form. The cases to which I allude were exhibited at the university cliniques, and were patients from the private practice of the professor then occupying the chair of clinical medicine, or were kindly referred to him by medical practitioners of the city. Most of the class will remember two cases of tabes mesenterica brought before them, one in the early part of the session, the other in January. The first was a black adult male, a pantry servant on a steamboat. This was a patient sent by Dr. H. Griffin, who had carefully made out the diagnosis. This boy had, so far as he was informed, healthy antecedents, but dated his decline from an attack of acute rheumatism over two years ago. He was greatly emaciated, having suffered from exhausting diarrhœa most of the period of his illness, had œdema of the feet and legs, hurried breathing and circulation, and seemed fatigued upon any slight muscular exertion. He suffered very little pain, but had a tumid abdomen, tender upon pressure. He had an obstinate diarrhœa, with liquid stools often containing undigested food. He had also the hectic of advanced stages of tuberculosis. These symptoms are strongly presumptive of the form of cachexy we

are discussing, but we demonstrated its existence, when by careful palpation of the abdomen we were able to discover through its walls the numerous protuberances of enlarged mesenteric glands.

The other patient was a female child, aged 8 years, a bright mulatto, born of a woman who claims to be healthy, yet all of whose children have died of chronic maladies. There was distension of the abdominal parietes in this latter case by fluid deposit within the cavity, still we were here able to detect the presence of enlargements from tuberculous deposits, by careful palpation. This child had been ill for nearly four months. She was at first supposed to have been infested with intestinal worms, and the family drugged her with some of the many patent vermifuges. The base of all these nostrums is some purgative, and there is scarcely a doubt but that this enfeebling medication hastened, if it did not even determine the tubercular development.

The prognosis in tabes mesenterica is extremely unfavorable. You should therefore acquaint yourselves thoroughly with its phenomena, so as to be able to recognize it at its inception. It is only then that we can hope for the successful exhibition of remedies, and it will save you mortifying mistakes in prognosis if you are enabled, upon your earliest visits, to warn the patient's friends of the formidable character of his disease.

It is an affection more common among negroes than whites, and often prevails upon large plantations so extensively as to create a popular belief that it is contagious. There is no real ground for this opinion, and its synchronous occurrence in many members of the same family is due to the fact that the exciting causes are liable to affect the whole household alike. In other words, the same hygienic errors and morbific influences are likely to pervade the whole family. Then, it must be remembered that the depressing effects of loss of rest by watching around the sick bed, and death of friends have invested both this form of cachexy and pulmonary phthisis with an appearance of contagion which is calculated to deceive the non-professional, but which the physician should refer to its real causes.

The treatment of both these cases has been analeptic. Dr. Griffin has kept his patient upon cod liver oil, iron and iodine, with generous diet, taking care to have its mode of preparation adapt it for facile absorption; he has applied over the abdomen when, tender and painful, warm fomentations; he has recommended as much exercise in the open air as can be borne without undue fatigue; he has controlled the diarrhœa with opiates and astringents. I think we could add nothing to these intelligent prescriptions.

The child has been under my care for nearly two months, during which time she has been taking cod liver oil and the sirup of hypophosphites. The latter is occasionally omitted and ʒi of liquor cinchonæ hydriod. cum. ferro. given thrice daily. Her diet has been ordered to be mutton, chicken or beef-broth, fresh milk and butter—these to be given in small quantities, but frequently. Her surface is to be bathed twice weekly with tepid salt water; her abdomen occasionally painted with tinct. iodine; her diarrhœa controlled by suitable astringents and opiates, and the child to be taken daily into the open air. But all these remedies will fail. I do not mean to say that patients with this disease must inevitably die, for a very small per cent. do recover; but both these patients before being brought before you had reached stages of tuberculosis, from which there is scarcely a hope of recovery. I remember, while a student, witnessing a recovery from tabes mesenterica in a negro girl about ten years of age, treated by my old preceptor,* a remarkably observing and successful practitioner, in the following manner.

Every morning one scruple of pul. ipecac was put in ʒiv of warm water, and half ounce of the infusion given every ten minutes until gentle emesis resulted, after this cod liver oil was given thrice daily and in the usual doses. The patient was required to drink in the course of each twenty-four hours a pint of decoction of the cimicifuga racemosa, which you will find is in growing repute as an alterative. She was allowed a generous, easily digested diet, and had free exercise in the open air. The ipecac was probably administered empirically, but experience has repeatedly demonstrated its efficacy in certain diseases of the alimentary mucous surface, in which no mere process of reasoning would have taught us to look for benefit from its use, and it is likely that it may have some revulsive influence in correcting the tubercular diathesis. At all events, I have given you good authority for instituting the treatment where you are called early and your patient's health is so good as to justify the exhibition of emetics.

[Both of the above patients died before the close of the session. The intestines of the adult were exhibited to the class, and may now be seen in the museum of the University, studded with tubercles of various developments and degrees of softening from the size of a hen's egg to that of a small pea. In the child no autopsy was obtained, because of severe illness in my family.]

Hepatic Abscess.—Jeffers, a coal-boatman 29 years of age, of small stature, dark hair, eyes and skin, addicted to occasional bouts of excessive drinking. This man had, in July or August

* Dr. Merrifield, of Bloomfield, Ky.

of the present year, an attack of what was regarded as remittent fever. His physician gave him mercurials and quinine, and he appeared to convalesce. His recovery was not complete, however, for he says he frequently suffered a dull sensation of pain in his right side, and rather more acutely in the corresponding shoulder.

In September he consulted Dr. C. K. Metcalfe, of this city, who, finding a train of symptoms which seemed to point to the liver as being especially involved, kept him upon a mild mercurial course until slight ptyalism was produced. This, with blisters over the hepatic region, has constituted his treatment.

We now find the patient with the following symptoms: He is but little emaciated, is, he thinks, something more sallow than usual; his sclerotica are perceptibly, though faintly tinged; his tongue is very slightly furred, with just a little increased redness about the tip; his bowels are generally regular, and the dejections of natural consistence and color; his urinary functions are normal; his appetite is good and digestion well performed. He has, as I have remarked, a good deal of pain in his right shoulder. This sympathetic pain is a very constant attendant upon inflammatory affections of the liver; then he has rigors occurring irregularly, not violent, but followed by a febrile exacerbation, and this passing off with quite a copious perspiration.

Percussion shows obvious enlargement of the liver; the line of hepatic dullness is found while he is lying down to mount nearly to the fifth rib, while inferiorly it is correspondingly depressed into the abdomen. Careful pressure enables us to define a tumefaction of the right lobe of the liver, and to my sense of touch the fluctuation of pus is apparent. You will observe that the patient can not lie upon the table with his legs extended and his head depressed. This position puts the recti abdominis muscles upon the stretch and gives him pain.

Now I have no hesitation in pronouncing this a case of hepatic abscess, and I should infer from its history as well as from all its appreciable characteristics, that it is a circumscribed solitary abscess, and not multiple as they are frequently found. Multiple abscesses are regarded as in most instances, the products of purulent absorption, and are preceded by formation of pus elsewhere. Consequently this form of abscess sometimes follows attacks of dysentery, in which instance pus is supposed to become detached from the ulcerated bowels, and to be carried by the force of the circulation to the liver, and in that organ become the starting points of new abscesses. This man has had no dysentery, nor any evidence of a previously existing state of pyemia, but it is altogether likely that he has had

acute hepatitis at the time of his first attack in July, and circumscribed abscess is not an uncommon termination of hepatitis. Other evidences that the abscess is not multiple are that the functions of the liver are not much disturbed, which would scarcely be so, if its parenchyma were largely involved; and if the concave surface were also the seat of abscess, his gastric functions would be more decidedly interfered with.

Recoveries from hepatic abscess are not rare, and may occur from resolution, or from the liver forming attachments to some surrounding structure and emptying the purulent collection either into the intestinal canal, or through the diaphragm and lungs into the bronchi, or exteriorly through the parietes of the abdomen. The indications here are that this abscess is tending to the last mentioned issue. Dr. Graves has advised an operation intended to hasten or determine this result, by cutting down to the peritoneum and filling the incision with lint to excite so much inflammation as to induce adhesion between the liver and free surface of the peritoneum.

This man's strength and spirits are good, and the whole aggregate of his symptoms, both general and local, indicate that his case is as favorable for recovery as we could desire.

I would advise non-interference. In the meantime, as a placebo, he is taking three drops of nitro-muriatic acid, largely diluted, thrice daily. If adhesions are occurring with the abdominal wall, and the abscess is pointing, we will promote the effort by emollient poultices and keep the patient quiet, lest by his movements he may break down the bands of newly deposited lymph; then, as early as we can satisfy ourselves that we can puncture the abscess without danger of its contents escaping into the abdominal cavity, it will be better to open it.

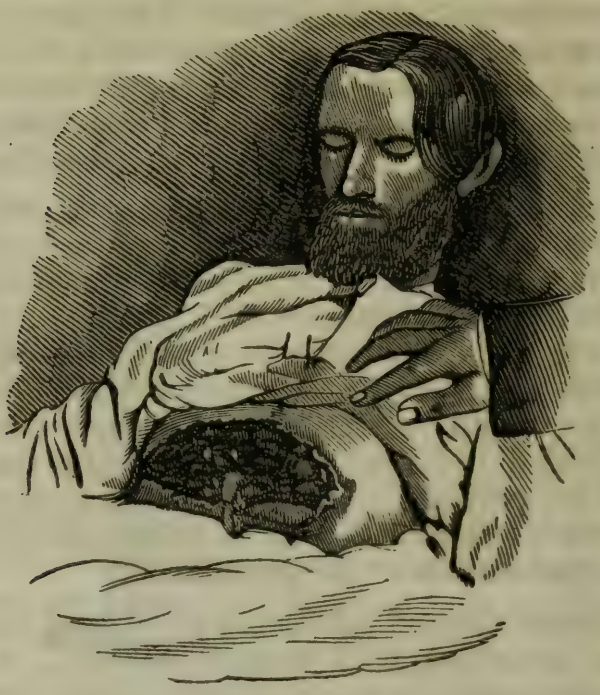
NOTE.—These remarks were made on the 27th November. On the 24th December the abscess was punctured by Dr. Benson, in the presence of Dr. Miller and myself. The puncture was made with a small, straight bistory, and matter of a healthy appearance flowed from the orifice.

The patient continued cheerful and hopeful, and seemed in a favorable condition until the 5th January, when a circle of an inch or more radius from the orifice became discolored and soon showed unmistakable evidence of sloughing. We attempted to counteract it by yeast and other antiseptic poultices, by surrounding it with tincture of iodine and nitrate of silver, and the various means usually resorted to to limit gangrenous inflammation. In spite of all these endeavors the ulcer continued steadily to extend itself by a slough, which reached entirely through the abdominal wall, exposing the destroyed parenchyma of the liver until, previous to the death of the patient, the ulcer measured in its lateral diameter over ten inches; in its perpendicular diameter, or from the umbilicus upwards, eight and one-third inches.

Death resulted on the 4th February. All our efforts to obtain a post mortem were unavailing. The highest favor granted as a reward for our long and assiduous attentions, was permission to take a photograph of the ulcer.

We subjoin a wood-cut, giving an accurate representation of its appearance. The elevated point near the center and lower margin of the ulcer, is evidently the re-

mains of the round ligament of the liver. The artist has conveyed a faithful representation of the depth the destructive process had reached.



"A Discourse, *addressed to the Kentucky State Medical Society at its Annual Meeting, held in Lebanon, April* 18, 1859. By Joshua B. Flint, *President of the Society.*"

In the list of worthies who are now contributing by address, by essay, by review, or by book, each his quota toward the establishment and maintenance of juster views of medicine as an art, few deserve to rank higher than the author of this discourse. Cautious, conservative as a practitioner, he is cautious, conservative as a teacher; and if those of the profession who undertake to teach, either by formal lecture, or by casual address, were a little more thoroughly imbued with this spirit of conservatism, it would doubtless tell largely for good upon the race of medicine-men who are to come after us, as well as somewhat upon those who now have in charge the health of the people.

To the man who occupies the right stand-point, there is a whole book-full of matter in that line of Chomel, quoted by Dr. Flint, "The *first* care of the physician is that he do no harm

to his patients; and then do them as much good as possible." It cuts up by the roots that old, and all but universal idea that drugs are antidotes—that there is an essential antagonism between morbid action and medicinal action—that for every ailment there is a panacea, and that it is entirely within the scope of a "real good doctor" to cure "right away" the very malady which perchance no mortal man can in any wise arrest or modify for good.

To "kick nature out of doors" is a very easy, and has been a very fashionable practice. Thanks to the better dispensation *on the way*, the good time is coming, indeed with some is now here, when a kindlier hospitality will prompt us to cultivate the best possible relations with nature, and invite her to *come and stay with us*. When we do this, then we shall "cure the sick," not according to the vulgar sense and application of the term, but according to its true and etymological meaning—*cura*, the Latin substantive, implies care, not physic; and the verb *curare*, to take care of, to conduct safely, not to medicate. So of the corresponding Greek term, *therapeuo;* it signifies I wait upon, I alleviate, I attend upon the sick, and not, I employ the materia medica, I prescribe jalap, or quinine, or calomel, or opium —the judicious use of such agents constituting only a part, and by no means an essential part, of the true physician's duty.

In what form of disease is professional attention to the sick more eminently conducive to a favorable result than in that grave and dreaded malady, typhoid fever? and yet, how inconsiderable a part of that attention, if wisely given, consists in the administration of drugs? Behold the victim of inexorable phthisis, now bled to dissolution by the disciples of Gallop & Rush, now debilitated by equally unwise confinement and nauseating expectorants, now tormented by blisters and issues, now drugged and nauseated by the fashionable hypophosphates, now suffocated and put in mortal peril by the hazardous cauterizations of Green; and now again behold him the fortunate patient, perhaps, of my namesake at Buffalo, refreshed by cordial drinks and invigorating food, mounting his horse on the plains of Nebraska, and bravely combatting his disease—peradventure, conquering it—by means not incompatible with the enjoyment of life, or the discharge of some of

its most urgent and grateful engagements. In such a presence who will heed the flippant cavil, "No physic, no physician?" * * * * "What, then, it may be inquired, is the doctrine and purpose of the New School of Practice in regard to the administration of drugs? Do we proclaim a crusade against the approved materia medica, renounce all the means it supplies for the modification of diseased action, and counsel physicians as well as patients, in the language of the great dramatist, to "throw physic to the dogs?" By no means. That were an ultraism almost as reprehensible as the most reckless polypharmacy." * * * "In avoiding the mischief of polypharmacy, let us not forego the advantages of a discriminating and prudent medication. We can not yet give up, without loss, even that family of medicines whose abuse has been more flagrant and disastrous than any other—the mercurials—and if compelled to relinquish the *opiates*, for one, I would throw up my diploma and make my professional conge at the same time."

These extracts we give as fair specimens of the safety—the conservatism, which so eminently characterize the general teaching of Dr. Flint, who may be regarded as one of the file-leaders in the ranks of the revolutionary army.

Crowded, as the entire discourse is, with matter which deserves the careful perusal of all such as desire to keep pace with the views of some of the best thinkers in the profession, we are disposed just now to comment only on two or three ideas which are so thoroughly in accordance with opinions which we have long entertained, that we not only give them a hearty indorsement, but promptly accept the author, if not as a "master," yet, from his classic learning and his professional experiences as one amongst our very ablest and safest "teachers." And one of the chief grounds of our faith in his safety and his soundness, is his inculcation of the necessity of greater reliance upon the existence and value of what is understood by the vis medicatrix naturæ.

He speaks of it as a favorite professional expression, but very pertinently asks, "Do we appreciate fully its actual signification in a professional sense? and do we respect it as we should in our dealings with disease? Is there, indeed, among the other wonders of our corporeal being, a subtile force, inhe-

rent in the very organization of itself, whose office it is to protect vitality in its very arcana—to correct errors of function, and restore lesions of structure? So our accepted phraseology implies—so, in some sense, our daily experience assures us, and so, also, some of the most striking analogies of nature intimate."

A thousand times asked, and very variously answered has been the question, "What is the *tendency* of *disease?*" We answer, without hesitation, its tendency is to death—always, invariably and under all its aspects, *to death.* How do we account then for the fact that a large proportion of the cases in civilized and savage life get well without any interference from the medicine-man? Simply by recognizing as a part of the organization, co-existent with vitality, a force, whose business it is to eliminate morbific agents—to overcome morbid action, and this co-existent force we may call what we please—the thing is ever living, ever acting, and has been called the vis medicatrix naturæ. And if *the doctor* has any real business in this world, it is to watch the processes of this mysterious agency in its struggles with disease, learn to estimate the relative strength of the life-tendency, and the death-tendency, and by the best philosophy and best experience of which he is master, *aid* the power whose servant he is.

It is not a little mortifying to find a journal of such respectability as the "New Orleans Medical and Surgical Journal," devoting page after page to so unfair an exposition of this particular class of opinions as embodied in the work by Sir John Forbes. The editor of that journal attempts to ridicule the idea of doing away with active medication by the ridiculous sophism, that unless medication is *active* it is *not* medication—"a medicinal agent without action is at once the maximum of absurdity." "For what thing soever is not active, is wholly inert and therefore not medicinal."* The whole article in the No. containing a review of Forbes' book, proves only one thing, but proves that very clearly, namely, that the editor has not in any measure taken in the meaning of the book which he so cavalierly treats and dashes aside. His southern cotemporary, however, the Charleston Medical Journal, takes, to our mind, a much more philosophic view of the tendencies in the teach-

* New Orleans Medical and Surgical Journal, Nov., 1857.

ings of to-day, and gives us a more hopeful view of the possibilities of nature in disease.

"The path of investigation, by philosophic minds of the profession, lies in this direction, and we may venture to predict that henceforth a reliance upon the power of drugs will be limited by reason. We have perceived our error in placing too much confidence in medical means, and are gradually returning to the habits of our predecessors in the close observance of the workings of nature, aided, as we are, by the improved appliances of modern times for the detection and guidance of her ways."*

With the enthusiasm, the energy, the rush which so eminently characterize our western blood, and tell upon and speak through the western brain, it is a subject of congratulation that one, of the learning and experience of Dr. Flint, should thus, as president of the State Society, place prominently before us the value, the necessity of conservatism in medicine. Routine medication, as the result of routine teaching, has become a jeer and a laughing stock, and it behooves the profession, which is stamping itself upon the generation which now is, to see to it, for the generations which shall come after, that while rigid routine is worth something, rigid thinking is worth more; and without deserting utterly the recognized landmarks, and great, long-trodden highways, we are surely not called upon to let our brains run in all the ruts which have been cut of old, and are being deepened day by day *only because the track is there.*

We do not think we are advocating utopian schemes—schemes which "detract from the dignity of the profession," nor rob it of one atom of that importance which is its due, and its reward over all the world, when we indorse the spirit of this address, and recommend its careful perusal to the readers of the Medical News.

If we were disposed to indulge in captious fault-finding, we might take the author to task for the utterance of a "settled conviction that the fatality and duration of disease, on the whole, would be far less under a total abstinence from all pharmaceutical agencies, than under such a meddlesome and heroic employment of drugs as finds its justification in standard

* Charleston Medical Journal, May, 1859.

works, and orthodox teachings, and honored examples of the last half century." By being adroitly quoted and emphasized, this passage may be made to look very like an utter condemnation of all books and all teaching to which the world has looked and listened for fifty years—but is this really the spirit of the paragraph? *Because* meddlesome and heroic medication have found their way into books and lectures of really great as well as really small men of the profession, does it follow that all the writing and all the teaching of a half century end in a meddlesome druggery? Surely *that* conclusion is cut up by the roots in the very line which follows and closes the paragraph we have just quoted—"abuses of things are never good reasons for the entire disuse of them."

Then, in regard to medical teaching: "Few circumstances have exerted such unfavorable influences upon the character and usefulness of our medical schools as the policy, too common among them, of inviting to vacant chairs a class of men who have educated themselves expressly for lecturers, devoted themselves to teaching as a means of livelihood, and circulated about the country, from place to place, sojourning, for the time being, wherever they could make the most profitable engagement. The effect of this policy has been, in the first place, to render the mercenary element in the economy of these institutions more predominant than it otherwise would have done. In the second place, to induce frequent changes in their faculties; and, in the third and most important particular, to commit the most practical departments of instruction, often, to men who were attractive rhetoricians and plausible dogmatists, but destitute, by reason of the very vagrant habits of their life, of that personal acquaintance with disease, and familiarity with its treatment, which are indispensable qualifications in one who is to prepare young men for the duties and responsibilities of physicians. No man should occupy any chair in a medical school, with the exception, perhaps, of chemistry, who is not, or has not, for many years of his life, been in active practice. Learning, eloquence, and scholarship are, indeed, most excellent and desirable accessory qualities, but can not confer the most essential qualifications for a medical teacher, any more than they could confer upon one of us the seamanship of a Hull or a Decatur."

Shall we, in a spirit of hypercriticism, attempt to wring from this passage a condemnation of some of the ablest teachers this country ever had? Because they are known to have done no practice, *therefore* their teaching was idle? There have been some extraordinary men in this same much abused medical profession which we all so love, and some of us so dishonor, and the chances are that even as eastern and as odd a man as Dr. Flint, would be willing, in the exercise of a reasonable charity, and a very small share of common honesty, to admit that sometimes in life we have found, and may yet find again, in the long-coming years, a great teacher without practice, setting in the high places of the profession, having the world's stamp upon him, known and read of all men. But with due deference to opinions leaning otherwise, may we not suggest that the addition of a *life of practice* would have added somewhat of value to the valuable teaching of these same men of mark?

The class of men to whom *we* allude are not the men who *seek* places; *they* are the sought; very unlike indeed to that large class of small men who, in mistaken and vulgar emulation of the really great, first fix their eye upon place, and then by all the appliances known to politics, medical as well as civil, eventually work their way up to *that*, and call it honor. The top of the Andes is said to present to him who has eyes to see, two rather striking phenomena: "to those solitudes of the pathless sky, by the force of wind and tumult in the lower atmosphere, are borne the smallest insects; in those serene solitudes, in the full flood of the undimmed sunshine, floats also the condor; the insects borne aloft by external force, and not by internal strength, are tossed hither and thither in the thin air, with their little pinions tattered and their little senses bewildered; the condor, with out-spread wings, rests upon the liquid ether as his native element." And round about the tops of our medical Andes, for all the world like the South American Mountains, where we find a single condor, we see in the "thin air" a perfect multitude of the smallest insects. Clap-trap, glib pretentiousness and facile word-wisdom, might derive a lesson of some value from the distinguished British Watson, who again and again declined, after an experience of thirty years, to attempt a course of lectures upon fever, giving, as a reason.

frankly and honestly, his modest consciousness of inability to do justice to the great theme—modesty utterly unaccountable to many men whose whole life is not equal to Watson's thirty years of *practical* experience—modesty inappreciable by the many whose minds are filled to repletion and choking with exotics, dug up elsewhere, and so clumsily transplanted that they never take root; unbearing and unprofitable in all their branches—covered with a thick bark without aroma, and throwing out no leaves from which even a thin tonic might be extracted.

We would not, in any measure, depreciate the value of all those extrinsic qualities which tell with such wonderful effect upon human nature every where and under all circumstances. Give us eloquence and deep learning if you have it, rather than dead stupidity; give us facile expression, rather than stammering speech; give us beauty in all its shapes, rather than deformity and ugliness; but let your eloquence and facile words of beauty be laden with the fruits of experience, permeated and enriched, while it is made fragrant by the very essence of what you have seen and assimilated. "Poetry is grand, but fact is grander," said the earnest Scotch McKaye.

S.

PROCEEDINGS OF THE COLLEGE OF PHYSICIANS AND SURGEONS, OF LOUISVILLE.

JUNE 21ST.

The Secretary read, by request of Dr. Rogers, a communication from Dr. J. R. Pirtle:*

Dr. Miller said that if this nucleus should be shown to be a tooth, and not calcarious matter thrown into this fantastic shape, he would still be skeptical as to the possibility of its passing from the intestines into the bladder, cutting its way through the coats of both viscera.

Dr. M. Goldsmith remarked that the history of all nuclei for calculi showed that they were introduced per vias naturales. There were in truth only two points of the intestinal tract where foreign bodies were prone to effect a lodgment; one of these was at the ileo-cœcal valve, the other at the sphincter of

* See page 449.

the rectum—at least, he does not know of the history of a case where lodgment occurred elsewhere, and from neither of these points would a substance, ulcerating through the intestines, find its way into the bladder.

Dr. Cook said that it was anatomically possible that this body might have passed from the alimentary tube to the bladder. He had, in his dissections, often observed the vesico-vaginal cul-de-sac occupied by a loose fold of ileum or of the sigmoid flexure of colon. The tooth might readily become entangled at this point, and by a slow ulcerative process work its way into the bladder. Cystic calculi having been passed with fæces, why should we not admit the possibility of substances perforating in an opposite direction? As an evidence of the powers of nature to sustain life, and even a comparative share of health, under ulceration, destroying plates of intestinal walls, he would instance a post mortem he had recently witnessed, in which the posterior superior surface of the stomach was entirely destroyed, and its place occupied by the liver. This lesion seemed to have been of years' standing, and had not, so far as he knew, any influence in causing death, which had occurred from typhoid fever.

He did not wish to be understood as advancing an opinion that this tooth did actually reach the bladder by perforating from the alimentary canal, but, anatomically, it was far from being impossible.

Dr. Powell was, like the President, somewhat in doubt as to this being a tooth, but if it is, he is in no state of uncertainty as to the manner of accounting for its presence in the bladder. It was undoubtedly introduced per urethra, the patient's disclaimer to the contrary must be set aside. We all know that children are prone to insert foreign substances into the various openings, and compensate for their ignorance of anatomy by assiduous efforts to find a passage.

Dr. Rogers said that from the patient's testimony there seemed to be a communication between the bladder and bowels. He did not know how much weight was due to her observations. The case was certainly one deserving further investigation.

On motion, Drs. Miller, Hardin, and Goldsmith were appointed a committee to examine the calculus with its nucleus, and report at next meeting.

Pharmaceutical Department.

By T. E. JENKINS, Pharmaceutist.

THE BARK OF THE AILANTHUS GLANDULOSUS, A VERMIFUGE.

M. Hetit has experimented therapeutically and physiologically with the powdered bark and the extract, and says that both have proved successful in producing abundant stools and expelling tænia.

The powdered bark was given in doses of eight grains, the extract in four grains.

He reports several cases of its entire success and reliability in the expulsion of tænia, and also believes that it possesses febrifuge as well as vermifuge qualities, and that its administration is quite safe.

GLYCERINE IN PRURIGINOUS AFFECTIONS, ETC.

M. Paupert states that prolonged experience convinces him of the justice of the opinion M. Demarquay entertains of the value of this substance used in lotion or ointments in prurigi-nous affections, accompanied or not with cutaneous eruption. In vaginitis, too, and in slight ulcerations of the cervix uteri it forms a most excellent basis (4 parts tannin to 60 of glycerine), and a cure soon results. M. Demarquay, indeed, used it as a substitute for grease whenever it was possible, in applications to the skin, or to superficial wounds. It possesses the great advantage of preserving the substances mixed with it for a long time unaltered.—*Moniteur des Hop. No.* 78.

EXPERIMENTS ON THE ACTION OF CAFFEIN.

Stuhlman & Falck, of Marburg, have made a series of thirty-eight experiments with caffein on dogs, cats, rabbits, birds, frogs, snakes, and fishes, clearly showing that caffein is a poison that will kill in comparatively small doses and in a short space of time. Thus five centigrammes (8-10 of a grain) in-

troduced beneath the skin of frogs and toads, determined local irritation, and affected the organs of locomotion. Synchronous with this or somewhat later, there is found hyperœsthesia of the nervous centres, with tonic, cataleptic, and tetanic cramps, and sometimes anæsthesia and paralysis.

In one case, the injection of five centigr. into the veins of a cat brought on death in a few minutes. A smaller dose produced death in a few hours. In addition to the tonic and clonic spasms, there was observed salivation, liquid stools, disturbed respiration and circulation, dilatation of pupils, reduction of temperature, and anæsthesia. A like dose introduced under the skin, excited salivation and vomiting, then adynamia, very labored respiration, reduction of temperature, with a tendency to fright, and spasmodic and paralytic phenomena.

Large dogs were not destroyed when five centigrammes were given by the stomach; but a dog which had survived such a dose, succumbed in two minutes after the injection of a like quantity into the jugular; while another dog larger and older was not destroyed by the injection of twenty-five decigrammes (about 40 grains) into the crural vein. (This difference of result is remarkable. Was it on account of the size and the race of the animal, or the vein into which the injection was made? It is unfortunate that this experiment was not repeated.) By whatever mode of administration dogs were purged, and food in the stomach produced vomiting. Rabbits died in an hour or an hour and a half with three decigram to five centigram, presenting symptoms analogous to those exhibited by the dogs.

Microscopic examination exhibited no alteration sufficient to explain the death. There was only found an inequality in the distribution of the blood, only hypervemia of some and anæmia of other organs; the heart, liver, and larger vessels contained much black blood possessing all the characteristics of venous blood. All the other alterations were insignificant.

The pathological disturbances caused by caffein are of a different kind; but the most important occur in the nervous system. It destroys by exhaustion of nervous power, and seems to act especially upon the heart and the parieties of the vessels. —*Archiv. fur Path. Anatomie und Physiologie.*

The quantity of caffein in good coffee varies from $\frac{1}{2}$ to $\frac{3}{4}$ or even 1 per cent.

Caffein has been recommended in those pains which affect one side of the head only (hemicrania) in dose of 1 to 3 grains. A writer in an English periodical says that its physiological action on man is very trifling, notwithstanding all that has been said to the contrary. He took twenty grains daily of *pure caffein* (equal to about six and a third ounces of coffee). This was continued daily for a month without producing any other effect than a *very slight* elevation of the spirits after each dose, similar to that produced by a small quantity of spirits of hartshorn.

A TOOTH, THE NUCLEUS OF A CALCULUS.

Communicated to the College of Physicians and Surgeons,

BY JOHN R. PIRTLE, M.D.

Mrs. H., a respectable married woman of this city, has been under my observation for the past two years, during which time I have attended her in several attacks of dysmenorrhœa. Otherwise she had enjoyed good health until about six months ago.

During the latter part of January last, Mrs. H. complained to me of painful micturition, and upon inquiry I found other symptoms of cystitis. The calls to empty the bladder were very frequent, and accompanied by a plentiful discharge of muco-purulent fluid.

Finding medicinal remedies unavailing, I made explorations for calculus, and discovered that to be the irritating cause.

Early in April I commenced trying to remove the stone, but failed to do so by the operation of dilatation, on account of the extreme susceptibility of the patient to pain, and of a great lack of impressibility by chloroform. Having procured a pair of very powerful forceps (made by Tieman, of New York) of a uniform thickness, I proceeded to crush the stone which was not of very easy access, on account of its fixed position at the upper and posterior portion of the bladder. In all my examinations and uses of instruments, I always found the calculus stationary, and in the same situation, whether the bladder was full or empty. I have estimated the size and shape at about that of a pullet's egg, and the consistence that of soft sandstone. After some six or seven operations of from three

days to two weeks interval, according to the condition of the patient, I succeeded in removing the whole of the calculus, together with its nucleus, which is a carious bicuspid tooth.

Immediately following the second and third operations, Mrs. H. informed me that she had passed considerable quantities of bloody urine by the rectum, and but little through the natural course. This somewhat alarmed me, but as there was no other unpleasant symptom, the alarm subsided. The time before the last use of the forceps, I was satisfied that there remained only a small portion of the stone, and that it was perfectly immovable, and therefore deferred further interference for some two weeks or more, during which time Mrs. H. expressed herself as being perfectly well.

When I came to remove the last of the calculus, taking a very firm hold, I tried *traction*, but found (by the means of a *finger* in the vagina) that the bladder followed the forceps, upon which I desisted and used *torsion*, and succeeded in releasing the body from its position, and immediately extracted it through the urethra, having it by its long diameter, and discovered it to be a bicuspid tooth partially carious. I then reintroduced the forceps in the same position, and passed them their whole length (which is eight inches), and entered what appeared to be a cavity, and upon withdrawing them they were followed by a flow of serous fluid (not urine) of about an ounce in quantity.

Upon inquiry made of the patient in a very close and searching manner, I found that some twelve or thirteen years ago, she had had a tooth drawn at a dentist's office, it being a bicuspid of the left side, but further than having it extracted she has no recollection. She also says that about eight years ago a physician in ——— treated her for what he called "gravel," and gave her something which he said would dissolve it. She recovered in a short time from that attack, but has always observed like symptoms at her menstrual periods, and ascribed her sufferings to some derangment of the functions of the womb. These symptoms became worse during the fall of last year, and became, after awhile, constant and resulted as I have described.

I account for the presence of the tooth in the bladder, by believing that the patient swallowed it at the time it was ex-

tracted, she being a child (her age is now 25 years), and so much frightened at having a tooth pulled as not to perceive when it was swallowed; and also from the fact that the tooth is too rough to be introduced through the urethra; and further, that Mrs. H. assures me that she was not well enough versed in human anatomy to know that there existed (previous to my use of instruments) a channel by which a foreign body could be introduced into the bladder.

Since the accidental swallowing occurred, the tooth has become at some time entangled by its jagged points in the folds of the intestinal canal, and has passed thence by a slow process of suppuration into the position in which it was found by my instruments.

The crown of the tooth was the only portion of it which was within the bladder, and on which the calculus was built, the fangs being imbedded in the walls of the bladder, which is shown by their smooth and very natural appearance, while the crown is encrusted with the calculous concretions of which the stone was composed.

Having been compelled to comminute the fragments of the calculus, so that they might be extracted and passed off with the urine without injury to the urethra, I have been unable to preserve more than about one-third of its bulk.

Since the completion of the extraction of the stone, Mrs. H. has been as well as ever she was in her life, as she expresses herself, with the exception that there is occasionally a sensation as if cold air came in contact with the inside of the bladder, giving the feeling of cold applied to a tooth with the nerve exposed. Not caring for this, Mrs. H. has gone to her relatives in another part of the State to recruit her health at my suggestion.

June 7th, 1859. JNO. R. PIRTLE.

P. S.—Not expecting to find any such an anomalous cause for my patient's sufferings, I have had no one present at the operations except the lady's husband.

Several communications have been received which will be noticed in our next.

Editorial Department.

Several medical journals have lately ceased to be, and are now with many predecessors, numbered among things that were.

If their exit denotes the decadence of a taste for medical literature, it is ominous of evil and reflects gloomily upon the good sense and habits of the profession. In some instances, at least, we know that failure has not resulted from want of merit or ability. It must have been from a morbid indifference or inanity in those whose state or local pride should have caused them to sustain periodicals even if their own taste for study were less influential than some other tastes less creditable.

The difficulties which attend the conduct of a medical journal are only known to those practically conversant with them, and there are a thousand fault-finders ever ready to complain and criticise, among whom, perhaps, you would not find one paying subscriber, and whose brayings indicate a length of ear denotive of laziness and stupidity.

As between a journal for a year, and a bottle of champagne, or a dozen journals and a thousand cigars, how many are there who would not select the journals, and yet they are the media through which medical knowledge is most rapidly conveyed. In our own State, famous for the number of its able surgeons and physicians, renowned abroad and honored at home for their zeal and erudition, efforts to sustain a journal have heretofore been unsuccessful. At present, ours is the only one published in the State, and yet notwithstanding the zealous cooperation of some of the most prominent practitioners in the State, and the flattering reception we have met with, and the encomiums of the press, and the complimentary notice of foreign cotemporaries, some of whom deem us of sufficient importance to be placed on their exchange list, although their terms are two fold greater than ours—notwithstanding this, we say, if one would examine our subscription list, he would

not find Kentucky as prominent there as we conceive she ought to be, although he would find the names of a great majority of those gentlemen who are known outside of their own kitchen or coterie.

Perhaps our success is commensurate with our deserts, but we would modestly suggest that our subscription list is not full, and that there is room for a few more names, which we would be glad to register.

The custom which obtains of crediting what you copy to the source from which you copy it, is one founded upon principle and honor. We have not ever departed from it, and will not do so. Will some of our cotemporaries be more particular in this respect, for recurring omissions might be mistaken for recklessness, and a continued neglect to acknowledge the rightful owner be deemed tantamount to deliberate theft.

SENSATION ANSWERS TO CORRESPONDENTS.

P. G., Brussels.—The irregularities have been unavoidable. Our five-fly press will now strike off thirty thousand copies a second—printing, stitching, binding, and superscribing included. You need not be apprehensive for the future.

A. S., Montebello.—Thank you for your flattering opinion. We prefer the electric knife and fly wheel saw for amputation on the battle-field.

J. S., San Francisco.—The usual period of utero gestation is nine months.

A. G., Metz.—There is but one State in the Union, one city in the State, and one Medical College in the city. The University rooms can accommodate four thousand students.

M. R., San Antonio.—Our Journal is the only channel through which Professor Blow's inimitable lectures are allowed to flow into the world's sea. They will soon be dramatized.

R. V., Hoboken.—Can not insert your communication. You have many journals in your own city. Select one of them.

A. F., London.—Yours, inclosing thirty dollars for ten years advance subscription, has been received and contents duly credited. Thank you for your appreciative benefaction.

T. S., Hamilton, Canada.—You are right in stating that our

city stands pre-eminently predominant in medical literature. and that it is the "only city in America suited for medical teaching." There is an obscure but pretentious village in a State called, we believe, Pennsylvania, which has been aspiring to position in this respect, but its reputation is entirely local.

P. G., Surgeon-General in the Allied Army in Italy.—"Send 25 copies of your sine qua non to headquarters. We might as well think of going to battle without ammunition as into surgical practice here without your indispensable journal." They shall be sent as desired. We are glad to find that our efforts to issue a journal worthy of this great and glorious country are appreciated in such exalted quarters. Aut Cæsar aut nullus is our motto.

E. S., Panatomohœ, Miss.—Copies have been forwarded to your several students. They have determined wisely. The obstetric clinic alone offers one case every three minutes, and the sole charge of it has hitherto devolved on the erudite professor who conducts it. Such labor requires superhuman effort. and were it not that a Supreme Being for wise and beneficent purposes has sustained his giant physical and intellectual power, he would have long since fallen a victim to his love for the profession and devotion to medical students.

—— —, *Pawneeton, Iowa.*—Please write more legibly. We can not decipher your initials, and will not therefore venture to insert what we suppose them to be. Some have already complained that none such as we have given are to be found in the places named, and some even assert that there are not such places in the State as we acknowledge receipts from. These complaints could not occur if our correspondents would write plainly.

Five dollars per number will be cheerfully paid for any copies of our journal issued in 1857. The demand for them from new subscribers renders this offer imperative.

Will some of our eastern cotemporaries please copy?

Homœopathy.—What is the motto of homœopathy? "Similia similibus curantur."

Explain? Infinitessimal Quantities produce Infinitessimal effects!—*Punch.*

Semi-Monthly Medical News.

VOL. I. LOUISVILLE, KY., AUGUST 1, 1859. NO. 15.

Report on Ovariotomy, *read before the Kentucky State Medical Society, at its annual meeting at Louisville, April*, 1857. By J. Taylor Bradford, M.D., *Augusta, Ky.*

"Go to the Parthenon and find, not what bunglers, but what great men have left undone."—Sculptor to his Pupil.

A Word of Explanation.—To you, members of the "Kentucky State Medical Society," who have confided to my humble ability a "Statistical Report on Ovariotomy" (I say *statistical*, implied though it may be, for ovariotomy is now a question of facts and figures, not of idle speculation), a word of explanation is justly due, as well as to myself.

For two years my leisure moments have been employed in the collection of statistics on ovariotomy, and few of you, who have not been pioneers in a newly settled territory, but have traveled upon a beaten track, where the *finger board* has pointed out the way, are aware of the labor it has cost me. The writing of a report is a small matter, but the collection of material upon a subject, about which so little is known, is, by no means, an easy task.

But to the explanation. I adopted Dr. Atlee's tables of 222 cases as a basis for my report, and up to January had registered, including his table, 289 cases. About that time, Dr. Lyman, of Boston, very kindly sent me his "prise essay just published by the Massachusetts State Medical Society," and to my unexpected surprise, *it contained three hundred well reported cases of ovariotomy.* I can not express to you my feelings at that moment; it was but too evident at a moment's glance,

that both he and myself, for many a weary hour, had been laboriously at work for the same purpose, and collecting materials from the same source. And perhaps I, better than any one of you, can appreciate the immense labor, the collecting and classification of his cases, cost him. I examined the report carefully, and found that he had collected 11 cases which I had not, and I had collected 20, including Mr. Clay's unpublished cases, which he did not have, my 20 being principally unpublished cases. After a short correspondence with Dr. Lyman, and no little reflection, as to what would be the better course to pursue, I have concluded as a supplement to this report to adopt the analysis of Dr. Lyman's 300 cases.

This singular coincidence, so far as I am personally concerned, is not without its regrets. But to this society, among the first, if not the very first, in this country, to call for a report of statistics, I felt anxious, so far as my ability could be exerted, to present a report, which would not only be worthy of the society, but creditable to myself. And whilst I, as your servant, regret yielding precedence to Dr. Lyman, after so much labor on my part, I confess sincerely, and with all due credit, that up to this period, no writer has performed the task so well as he.

With the exception of the chapter on the diagnosis, I have, therefore, in this short time, had to write a new report, or reverse a principle in that school, of which I am a pupil, "that true magnanimity does not consist so much in never falling, *but in always rising when we do fall.*"

The interest of the present report will consist principally of—

1st. A short history of Ovariotomy and the principal operators.

2d. Diagnosis, and its errors.

3d. Letters from Professors Gibson and Atlee, of Philadelphia; Clay, of Manchester, England; Mussey and Blackman, of Cincinnati; Miller, of Louisville, Ky.; Saml. Cartwright, of New Orleans, La.; and Dr. B. W. Dudley, of Lexington, Ky.

4th. Statistics of all the operations performed in Kentucky, with a short notice of each case.

5th. Operations with which I have been connected, with here and there, throughout the report, some practical allusions.

REPORT ON OVARIOTOMY.

Perhaps no branch of surgery, for a period of time, so completely divided the members of the profession, both in Europe and in this country, or created a more vehement and bitter opposition, than did the operation of ovariotomy.

It has been regarded as a monstrous innovation upon the legitimate principles of surgery; and the defects and errors of diagnosis have been seized upon by its opposers with a leopard-like spring of energy, which is seldom met with in the "healing art."

And here (as I do not expect to write an essay on ovariotomy,) I trust you will pardon me for alluding to a report —— on surgery, read before this society in 1854. It may be remembered that the reporter, ———, in his allusion to the operation of ovariotomy, denounced the operation and operators with a fierceness which would seem to interdict that well established principle of philosophers on all subjects—that an honest difference of opinion may exist; and that until the light of reason has clearly demonstrated the folly and preposterousness of such opinions, there is due that amount of courtesy which becomes the liberal investigation of truth.

The tone of medical journals the past few years, and the march of public opinion in favor of ovariotomy, may have taught you that the operation has outlived the scrutiny of that report.

There are but few improvements in science, which, in their struggle for legitimacy, have not their opposition.

Even the immortal Jenner, whose discovery of vaccination links with his name the brightest remembrance of the past, met with opposition; and it was written in books, and by the wayside, that they who were vaccinnated must of necessity be "converted into brutes; that children sprouted horns, others had the hair of calves," and that it infused into the system the constitutional diseases of those from whom the virus was taken.

Dr. Simpson's discovery of chloroform, that messiah-like unction which hushes into repose the most severe pain, also had its opposition, and the physician who would use it, was considered as "breaking alike the laws of nature and of God."

There still exists in the minds of some of the profession a contrariety of opinion, as to whom the credit of the first operation is justly due. So far back as 1782, Dr. L'Aumoner, of Rouen, has the credit, according to Mason Good and Mr. Brown, of Europe, and Dr. Atlee and Dr. Lyman, of this country, of performing the first operation for ovariotomy.

Dr. McDowell's operation, as you well know, was performed in 1808. Now let us examine and see which is ovariotomy, and whether, as Prof. Gross says, the case of L'Aumoner is any thing more than an "abscess of the ovary, consequent upon parturition."

I quote the case of L'Aumoner as reported by Dr. Lyman: "The disease," he says, "apparently followed delivery; had obstinate diarrhœa, and a *purulent discharge* from the *vagina*, *increased by pressure* on the tumor. Incision four inches, along lower edge of obliquus externus, and a scirrhus ovarian cyst, the size of an egg, was found in connection with an abscess, which was tapped, and a pint of dark fetid pus issued from the Fallopian tube with which the ovarian abscess communicated. The adhesions were torn away between the tube and the ovary, and the latter removed. No ligature used. The cavity of the abscess was filled with lint, dipped in the yolk of an egg and in honey. Suppuration of the abscess ceased the 20th day, and she left the hospital well.

The well known case of Dr. McDowell was Mrs. Crawford. Incision nine inches long, and made on the left side of the median line, some distance from the outer edge of the straight muscle. As soon as the incision was made the intestines gushed out on the table, and so completely was the abdomen filled by the tumor that they could not be replaced during the operation. A ligature was applied around the pedicle, tumor opened, and 15 pounds of gelatinous fluid removed; pedicle divided, and sac, etc., extirpated. The whole tumor weighed twenty-two pounds and a half. In five days Dr. McDowell found her making her bed, and in twenty-five days she went home well.

You will recollect, that in the case of L'Aumoner, no ligature was applied, simply an incision made in the abdomen, and the abscess tapped. It is not fair to presume, that when a purulent discharge was issuing from the vagina, and the dis-

charge increased by pressure, with a tumor so small, that the incision in the bowels was for any other purpose than the simple operation of paracentesis, or to ascertain the real cause of the disease.

In Prof. Gross' report on "Kentucky Surgery" to the State Medical Society in 1852, I beg leave to refer you for such information as relates to the early history of ovariotomy in Kentucky, and for an interesting biographical sketch of Dr. Ephraim McDowell. I have alluded to the cases of Dr. McDowel and L'Aumoner, from the fact, that from one or the other, we are to date the memorable epoch of ovariotomy.

It is difficult to ascertain how often our renowned Kentuckian (Dr. McDowell) operated; some of his relatives say thirteen times—of eight operations there is an authentic record, and of these seven were successful; in two the tumor was not removed, and in one there was no tumor found; this last, however, was a case of his and Dr. Smith's, which, if included among his cases, would make nine operations.

Such success in a difficult and dangerous capital operation, just springing into existence—without precedent or a footprint where the son of man had trod—is without its equal, and shows the operator to have possessed a happy union of courage and prudence.

Dr. McDowell's success in other departments of surgery was equally signal. He is said to have operated thirty-two times for stone without losing a case. One of his patients was President Polk, whose operation took place prior to his election to Congress. Dr. McDowell was remarkably cautious in the selection and preparation of his cases, and to this fact, together with his steady hand and accurate anatomical knowledge, may be ascribed much of his success. It is a singular fact, that Dr. McDowell always operated on Sunday morning, giving, as a reason, that he always "liked to have the prayers of the church."

He was a liberal and charitable man, and his fees were generally regulated by the ability of his patients. On one occasion he agreed to operate upon a lady near the Hermitage in Tennessee for five hundred dollars. After the operation was completed and he was about to return home, he was presented with a check for fifteen hundred dollars.

This is, perhaps, the most princely fee which any surgeon has obtained, either in Europe or this country, if we except the thousand guineas paid Sir Astley Cooper for an operation performed in the West Indies. I have read some where, that the learned Apono, of Pabrea, refused to visit Pope Honorius IV. without receiving four hundred ducats for each day's visit.

In an operation for stone, I once had the honor of holding the staff for Prof. S. D. Gross, of Philadelhpia, for which operation he received one thousand dollars.

Dr. Gross, from whose report I have taken most of the above incidents, thus sums up Dr. McDowell's character: "*He was a deep and original thinker, a bold, fearless, intrepid, and original operator; a faithful and adroit physician, an honest, upright, conscientious, and benevolent man, whose career, in whatever aspect it may be contemplated, affords an example worthy alike of our admiration and imitation.*"

The remains of Kentucky's "first great surgeon" sleep in the burial ground of Gov. Shelby, five miles from Danville. Some time since, while on a visit to the interior of Kentucky, my curiosity led me to visit this memorable spot, and while looking upon the modest and plain marble slab which bears the simple inscription "Ephraim McDowell," I felt as if at the grave of one whose sacred labors was worthy of my pilgrimage hither; and as memory wandered back to the period of his first ovarian operation, when the incredulous scoffs of the first English surgeons, and the caustic derision of the "London Medico-Chirurgical Review," together with the refusal of Dr. Physic, the "father of surgery," in our own country, to publish or read to his class a copy of Dr. McDowell's operations; I could but feel a becoming pride that the "backwoods Kentuckian" (as Dr. James Johnson styled him) had triumphed.

The success of our distinguished Kentuckian in private practice, as in surgery, had few if any equals, and while I listened in his own town to those who knew him well, I was never so forcibly reminded of the skill of Him who "cleansed the leper, opened the eyes of the blind, and unstopped the ears of the deaf."

DR. LIZARS.

Next to our renowned Kentuckian appears Mr. Lizars, of Edinburg, who, in 1823, first attempted the operation in Edin-

burg. He operated by the long incision after the manner of Dr. McDowell. One out of his four cases recovered. His first case was examined by the most learned men of Edinburg, and after agreeing that it was ovarian tumor, Mr. Lizars proceeded to operate, whereupon obesity and flatulence revealed itself instead of ovarian tumor. His second case recovered; the third died; and in the fourth, (which I shall notice elsewhere), the operation was abandoned, he having encountered a fibrous tumor strongly adherent.

The cases of Mr. Lizars, from their marked errors of diagnosis, set the whole surgical world in commotion, and while upon one side of the Atlantic the success and brilliancy of Dr. McDowell's operations was eagerly looked too, upon the other side the failure of Mr. Lizar's operations gave to the English surgeons, already willing to doubt the success of Dr. McDowell's cases, room to waver, and for several years the operation slumbered.

It was the slumber, however, of a *vigorous* child, whose features seemed as if some "happy thought" of coming triumph played at its "heart-strings," when in its strength it would go forth, "giving beauty for ashes, the oil of joy for mourning, and the garment of praise for the spirit of heaviness."

In 1842, Mr. Charles Clay, of Manchester, England,—now, perhaps, the most distinguished operator in the world,—commenced his series of operations. He informs me by letter, to which I refer you as a part of this report, that he has now operated seventy-six times, and may be read thus:

"Of first 20, 8 died, 12 recovered.
Second 20, 6 died, 14 recovered.
The last 36, 9 died, 27 recovered.
First cases, 1 death in $2\frac{1}{2}$.
Second cases, 1 death in $3\frac{1}{2}$.
Last cases, 1 death in 4.

This, says Mr. Clay, is, "I believe, the legitimate mode of viewing the question (progressively) by which the mortality is shown to be *gradually lessened* by *practical experience*."

Charles Clay was the first English surgeon to perform the operation of ovariotomy by the *long incision*, and it is said by Dr. Blundell, that "perhaps no operator in any branch of sur-

gery ever had such a weight of professional odds against him, as had Mr. Clay in the operation of ovariotomy."

He has triumphed, however, and his record is before you, over his own signature.

Mr. Clay is now fifty-six years old. He is reputed to be a "bold, prudent, graceful, and elegant operator in any department of surgery." At the time of his 55th operation, not less than "*eleven hundred pounds of diseased structure* had been removed from the human body in this special operation alone." It would now, perhaps, making an average of twenty-five pounds to the patient, amount to near *two thousand pounds!!*

Mr. Clay is now in possession of the largest obstetric library in the world, being able to quote from 2,500 authors on that subject alone; and whilst yet a student, he is said to have taken notes from 500 volumes.

In the "London Medical Circular and General Medical Advertiser," to which I am indebted for much of the information relative to Mr. Clay, I find letters from James Blundell, congratulating Mr. Clay upon his success. I will quote briefly a part of each.

"*Dear Sir:* My cordial congratulation on your success—not the hap of lucky incident, but the well-earned result of a just mixture of enterprise, science, and exact care. A few years and I trust it will appear, *abdominal surgery is at present only in its infancy;* but, then, what an infancy! how full of bloom and promise! JAS. BLUNDELL, M.D."

Again, in another letter dated October, 1845:

"Forbe's Review I have just read. It ought not to disturb you for a moment. These men are butting their heads against a stone wall; and the grimaces they make on feeling the solidity of the materials, are as amusing as they are pitiable. Applauded by all who have honesty and intelligence enough to appreciate your efforts, you may well persevere, for to use the reviewer's own citation, it is indeed a 'high and holy undertaking.' Yours, etc., JAS. BLUNDELL, M.D."

Prof. Simpson, of Edinburg, among many others, encouraged Mr. Clay—sent him patients for his opinion, and was the *first to suggest* the term *ovariotomy*, which Mr. Clay at once adopted.

DR. WASHINGTON ATLEE.

Next in the arena of operations, in 1844, our own countryman, Dr. Washington Atlee, of Philadelphia, commenced his series of operations. He informs me by letter (which is made a part of this report), that his operations now—March, 1854—amount to twenty-three cases.

Of first 10, 6 died, 4 recovered.

Second 13, 4 died, 9 recovered.

The profession in this country owe Dr. Atlee a lasting debt of gratitude for his vigorous and energetic exertions in behalf of the operation of ovariotomy. His table of cases bearing date as far back as 1701, and coming up to 1851, comprising 222 operations, then the most numerous collected in the world, must have cost him an incredible amount of labor. And this arduous task has been no less signal, than the brilliancy and success of his operations.

Dr. Atlee's "Prize Essay on the surgical treatment of certain fibrous tumors of the uterus," together with his numerous contributions to the "American Journal of Medical Science," on ovarian disease, is full of interest and instruction; and to these articles, together with the publication of his own operations in ovariotomy, we may attribute in a great degree the spread of the operation throughout this country.

It would be both difficult and tedious further to particularize operations in this country, however earnestly I may be induced to do so. I may say, however, and I trust with as much truth as pride, that in the West, the operation of ovariotomy has attained as great, if not a greater degree of success, than in any part of the United States; and in Kentucky, as renowned for her surgery as for her chivalry, we have gone as far "as he who goes farthest."

Those of you who have read the report of Professor Gross on "Kentucky Surgery," must feel proud of the surgery of your State. It has kept pace with the intelligence, the agriculture, and the chivalry of her sons. And whilst the reputation of the intellect and patriotism of her statesmen is world-wide; whilst even along the classic shores of Greece,

> "They mingle with their grateful lay,
> Bozzaris with the name of Clay,"

you have produced the first and the greatest *ovariotomist*, Dr. Ephraim McDowell; and you have produced the most renowned *lithotomist* known in any clime, Dr. Benjamin W. Dudley.

DIAGNOSIS.

"Ah! there's the rub." And when I approach the examination of a case in which a proper diagnosis is sought, I am frequently reminded of that remarkable passage in the Book of Books, "*He that thinketh he standeth, take heed lest he fall.*"

It is said by the historian, McCauley, that a "history of the *errors* and *follies* of a nation is essential to the generation which follows." So it is with ovariotomy. Its past history presents an array of errors and grave deceptions which is perhaps without a parallel, in mind or memory. It is said by Mr. Phillips, that the most learned men of Edinburg examined a case with Mr. Lizars, and after agreeing that it was ovarian tumor, Lizars proceeded to operate, whereupon obesity and flatulence revealed itself instead of ovarian tumor.

In a second case of Mr. Lizars, the memorable case of Magdalene Bussy, a case so often appealed to by opposers of ovariotomy, to show how long ovarian disease may remain harmless, Mr. Lizars attempted the operation for ovarian tumor, but failed; the wound was closed up and the patient recovered. Twenty-five years after, this patient died of apoplexy. Dr. Simpson was present at the post mortem examination, and in a note to Dr. Tilt, says: "The tumor was pediculated, but fibrinous and uterine, not ovarian." In a letter to Dr. Robert Lee, after the post mortem examination, Mr. Lizars says: "Then (alluding to the time of the operation), every one who examined her, considered the tumor ovarian and free from adhesions."*

In the case of Smith and McDowell, where the patient had tapped herself ninety times, both considered the diagnosis as certain, but on opening the abdomen, no ovarian tumor was found, but a mass of intestines matted together by adhesions.†

Dr. Lyman relates the case of Boinet, where the best surgeons were unable to decide upon a tumor. A consultation

* London Lancet, Vol. 1, 1851.

† Appendix to Cooper's Surgical Dictionary.

was held; among those present were Roux, Blandin, Robert, Montaine, of Lyons, Recamier, Joxbert, Martin, Lolin, and others. Opinions were divided between pregnancy, extra uterine pregnancy, fœcal accumulations, encysted ovary, collection of blood in the uterus, etc. She was under observation many months, the tumor eventually disappearing after an attack of diarrhœa.

Henry Smith relates a case where an incision eight inches in length was made for the removal of ovarian tumor. Both ovaries were found to be sound, and *indurated omentum* found to be the cause.*

Prince relates a case which was pronounced to be ovarian tumor. He operated; tapped the patient; but a few drops of blood escaped; he cut and tore the part with the finger; tent introduced. In a few days the patient died. A post mortem examination was held, whereupon a large *pediculated tumor of the spleen* was found, loosely adherent to the peritoneum. †

Dr. Philip Buckner, formerly of Kentucky, to whom I am indebted for much of my early information with reference to the operation of ovariotomy, diagnosed a case as ovarian tumor; "operated by an incision of nine inches; no ovarian tumor found; but a tumor situated in the mesentery, between the lamina of the peritoneum, and surrounded by small intestines. The operation was proceeded with, the tumor dissected out, and the superior mesenteric artery and other small arteries tied. The patient recovered, and in spite of the great separation of the mesentery from the intestines, no apparent bad consequences of any kind ensued." This, says Mr. Brown, of Edinburg, "is the most hazardous feat of operative proceeding I am acquainted with, in which our transatlantic brother has gone ahead."

Mr. Harvey presented a case—of much interest to the London Medical Society—of supposed ovarian dropsy. Ovariotomy was determined upon, but not performed; and when the patient died, the disease was found to be an *hydatid cyst*, connected with the liver, no ovarian disease whatever existing.‡

I have collected many other cases of equal interest bearing

* Philadelphia Med. Ex., Jan., 1855.

† American Jour. Med. Science, 1852.

‡ American Journal Medical Science, Oct., 1852.

upon this point, but those already quoted are "proof strong as holy writ," that the diagnosis in ovarian disease has been, and still is, most wofully defective. But while I freely acknowledge the enormity of these errors, I am fully convinced that the diagnosis is yet in its infancy, and that many of these errors have and will yield to the increasing energy which is being brought to bear by many of the first men of the profession on this subject.*

It is not alone in ovarian disease that very grave and flagrant errors have been committed by distinguished surgeons. It is said that Sir Astley Cooper and Dr. Hlighton, of London, in a case of pregnancy, where the quantity of *liquor amnii* was so enormous as to render fluctuation distinct, appointed a day for the operation of *paracentesis*. In the mean time the lady was taken in labor and delivered of a child.†

Mr. S. G. Goodrich, whose literary labors exceed those of perhaps any one in this country, being the author and editor of one hundred and seventy volumes, and the father of the Peter Parley literature, was attacked with what seemed to be disease of the heart. At that period he was obliged to be carried up stairs, and never ventured alone, being subject to nervous spasms, which threatened sudden suffocation; he went to Europe, and at Paris consulted Baron Larroque and L'Hennier, both eminent specialists in diseases of the heart. They interdicted wine, and required him to live on light vegetable diet. Afterwards despairing of relief, he returned to London, where he consulted Sir B. C. Brodie, who decided that no organic disease existed, and that the difficulty was *nervous irritability*, and required him "to feed well on good roast beef," and "to take two generous glasses of wine" with his dinner.

Mr. Abercrombie, of Edinburg, afterwards confirmed the opinion of Sir Benjamin Brodie.

It is now twenty-five years since this consultation occurred, and Mr. Goodrich is still living, having already sold of his own writings seven million copies.‡

"How often," says Dr. Buchanan, "has the operation of *lithotomy* been performed without finding a stone in the blad-

* Brown, p. 196.

† Brown on Sur. Dis. Women, p. 196.

‡ Goodrich's Recollections of a Lifetime, p. 282.

der, or if found, the stone being encysted and not removed, and the operation remaining incomplete." Yet in surgery this is legitimate. In all the departments of surgery, as well as of ordinary practice, and in diseases too about which the profession have been writing and investigating for hundreds of years, grave and serious errors have been committed. Why not in a disease that is as yet in its infancy as to its science?

I might cite you to numerous instances in pregnancy, from the medical jurisprudence of the country, and from *obstetricians*, where serious and acknowledged errors have been committed. Indeed I know in my own history of a case where two respectable practitioners deliberately examined a lady supposed to be pregnant, and who was then in the sixth month, but who declared that she was not pregnant, and that it was a foul slander upon her character. However, "murder will out," and in the course of events, a son was the result of their grave diagnosis. This same patient was under the treatment of a practitioner for several months, but with all the poultices and hot fomentations his genius and skill could bring to bear upon the swelling, it would not go down until nine calendar months had duly elapsed.

I might enumerate many instances in the common practice of our profession, where errors in "high places" are daily committed. I will mention one from the memorabilia of my own case book.

Not long since I was called to see ———, of Chicago, who was at that time in Kentucky. I found him jaundiced and much emaciated. He had been unwell for many months, had been treated, he said, by the faculty of Chicago, by some for a neuralgic affection of the stomach and liver, and by others for a spasmodic action of the "duct leading from the liver." He was finally advised to travel, but before reaching Cincinnati, on his way to Kentucky, was attacked in the cars. At Cincinnati he was treated by Dr. Taliaferro, who advised him to go to the Blue Lick Springs. He went there with the hope of clearing up his skin, and was there attacked again. From thence he went to Brookville, at which place I saw him, in consultation with Dr. Corlis. He was then suffering with a severe paroxysm of pain, commencing in the right hypochondriac region, branching off to the shoulder. The pain was in-

creased by motion, and often after a meal, pulse nearly regular: and when these irregular attacks of pain would cease, it was *all of a sudden*. It goes off like no other pain, with or without inflammation. After I had finished the examination and had a conference with Dr. Corlis, he requested me to give an opinion. I told him he was suffering from *gall stones*, passing from the liver. "What," said the patient, "a quarry in the liver?" He reminded me that each medical man whom he had consulted had a different opinion, and that he did not know whom or what to believe. I directed the nurse, when the bowels were acted upon again, to thin their contents by pouring on water, and then to pour out the contents of the vessel on a white cloth. On the next morning the nurse handed to the patient *two small pebbles* or *gall stones*, one as large as a pea and the other the size of a grain of wheat. On my next visit I found him cheerful and "ready to render unto Cæsar the things which are Cæsar's." In a few weeks he went home. Soon after he was confined to the bench for three or four weeks, trying the well known case of Green for the murder of his wife, and was again attacked. I was telegraphed to go and see him, and in connection with his attending physician, advised him to leave the bench. He did so, and since then married near Lexington, Ky., and is, I learn, in good health.

A correct diagnosis is the keystone of success in ovariotomy, and the care with which we trace its parts should be the landmarks—the corner trees by which we take distance, and move with our compass.

Much of the illiberal opprobrium heaped upon the operation, and on operators in general, has been the result of "itching palms" for professional renown, of unmatured and hasty diagnosis, and of the difficulty inexperienced operators have had to get what information is legitimatety in the hands of experienced operators. There is perhaps no disease incident to human flesh, which requires so deliberate, close, and patient investigation, as that which relates to ovarian disease. A drop of water falling into a bucket is small in itself, and scarce worthy of note, but in this way the bucket may become full. So it is in the diagnosis of ovarian disease, each symptom, however minute and seemingly of little consequence in itself, if carefully noted and properly weighed *as a whole*, will generally enable

us to arrive at proper conclusions. And in this rule of action lies one of the secrets of success in ovariotomy. Show me a surgeon, who in other operations may have his share of success, but who has a summary way of examining his patients, and of dispatching his operations, and I will show you one who is unsuccessful in ovariotomy.

I am fully sensible of the importance, and the difficulties we encounter in obtaining such information as will guide us in the examination of ovarian disease. Less has been written about it, in proportion to its importance, than any class of diseases known to the "healing art." I shall therefore attempt, from my own humble experience, and that of others, so to classify the symptoms and means of examination, that "he who runs may read." I may say, however, that you may meet with cases, which for the time being may baffle your strongest apprehension and your most scrutinizing examination. I believe with Dr. Armstrong, that "when we find ourselves in the *dark*, it is better to stand still until the light returns," than to run the risk of going over a precipice. In other words, it is better prudently to wait for further developments. It is said that the "wise and active conquer difficulties by daring to oppose them," and in this age of wonders there is scarcely any thing insuperable. I remember to have read of or seen at some time, a picture representing a party of men, their hats and coats lying by their side, and with pick-ax in hand, attacking the base of a mountain, whose summit towers far above their heads. We look again, and the steam-horse, as though "the speed of thought were in his limbs," follows their footsteps through the bowels of the earth.

Before commencing the examination of a patient supposed to have ovarian tumor, or dropsy of the ovaria, it is important to have the bowels and bladder emptied. If there is much tenderness or soreness in handling the tumor, it is better to give the patient chloroform, as it will enable you, without pain on her part, to conduct a more complete examination. Prior to this, however, sit quietly down, as if the day was devoted to this particular purpose, and obtain from the patient a complete history of the case. How and when the disease commenced, of how long duration, whether painful or not, in what state the general health, whether the menstrual discharge is

regular, does the tumor move from one side to the other in turning, is it as far as you have observed moveable at all, has it by any course of treatment diminished in size, has it any time been accompanied with swelling of one or both of the lower extremities, etc., etc.

The patient should be placed upon the back, with the extremities flexed, so as to relax the abdominal muscles. Our aim must be, in the examination, to ascertain whether the tumor is *ovarian* or not, and then its *pathological character*. In two-thirds of the cases which I have examined, I have found the tumor to commence in the right or left iliac fossa; and the patient to describe it, when first noticed, to have been as big as a hen's or goose egg. In other instances it attains to considerable size before it is noticed. I operated on a case last summer, where the tumor attained the weight of twenty-four pounds in thirteen months. The patient did not know upon which side the tumor commenced, and was under the impression that she was merely becoming fleshy, so little was she complaining. In ovarian tumor there is generally but little disturbance of the general health. The stomach, liver, and kidneys generally maintain their usual action. So even with the menstrual discharge, except where both ovaries are diseased.

Dr. Frederick Bird has published a case, where the disease was of *sixteen years* standing, and during *seven years* of that time the menses disappeared—operation, patient recovered.

In fibrous or scirrhus tumors of the ovaria, the menses are oftener irregular than in encysted tumors. Occasionally you will meet with a case, where, in the early part of the disease, the patient suffers with what she supposes to be colic. At such time, if the tumor (or bowels) is *firmly pressed* upon, the pain may be traced deep down in the right or left iliac fossa. At other times, from active exercise, or exposure to a sudden change of air while exercising, a diffused soreness will be felt over the bowels. A lady (Mrs. Burns), near Marietta, Ohio, came to Augusta to consult me for the treatment of "dropsy of the bowels." Soon after her arrival, she was attacked with violent pain and great tenderness of the abdomen, so much so, that no pressure could be borne upon the bowels. She was confined to her bed for ten days. I learned from her that such

attacks were frequent, and she attributed the present one to the travel in the cars, or from the walk from the boat to the hotel. When the pain and soreness of the bowels had subsided, I made a careful examination of the case, which convinced me that it was ovarian tumor. With the exception of these occasional attacks, her general health is good, and in consequence of this fact, I have not yet operated upon her.

May these attacks not originate from the friction of the tumor against the peritoneum, causing some degree of inflammation to set in? I merely mention this case, and may, by the way, mention others, where it will illustrate a fact or corroborate a principle.

(To be continued.)

Science and Success, *a Valedictory Address, delivered to the Medical Graduates of Harvard University, at the Annual Commencement, May* 9, 1859. By Henry J. Bigelow, M.D., *Professor of Surgery.*

This is a high order of valedictory literature. The usual routine of such discourses is departed from, and we have presented to us truths verified by daily observation, expressed in an elegant, bold, and vigorous style. However unpalatable to our professional pride, we must admit the correctness of this annunciation: "Let me at the outset explode any lingering belief that what is usually called eminence in science necessarily produces medical practice; or that large medical practice implies any thing in respect to medical science." The ardent pursuit of science in its higher walks seems incompatible, as a general rule, with those qualities that secure a very large medical practice. Many elements must unite in making up the character of the popular practitioner. High reputation which so often pours its golden flood upon its possessor, is not necessarily the gift of extensive scientific attainments. In the language of our author: "There is a machinery to fame. It is one thing that a quality should exist, and another that it should come to be known. In civilized centres, talent and attainment generally make their mark; but sterling, sound sense and excellent medical acquisition may be sown through every village

in the land, unambitious and unobtrusive; while on the other hand, men upon whose medical judgment you might justly hesitate to rely, may by adventitious circumstance or a thirst for notoriety or gain, be urged into a really conspicuous position."

There are many other points in this excellent address to which we would gladly make reference, but our diminishing space admonishes us not to indulge our inclinations further.

An Anomalous Case of Acute Rheumatism. By E. W. Lane, M.D., *of Scarboro, Ga.*

Ann C., æt 16, of sanguine, nervous temperament and good constitution, was attacked with acute articular rheumatism about the 22d of January, 1858. She had been walking about the yard, and her feet became wet. She slipped off her shoes and held her feet to the fire to dry them, and, on attempting to walk, discovered that her right foot was sore. It continued to grow worse until the 26th, when, on attemping to walk, she was seized with severe pain in the right ankle, and was compelled to refrain from any further attempt at walking. She was lifted up and carried to bed, and I was called to see her.

Symptoms—Ankle somewhat red and slightly swollen; very little fever; tongue slightly coated; bowels constipated. I prescribed calomel and jalap, each ten grains.

27th, M. Light fever; pulse 95; pain increased; ankle much swollen, red, and glossy; tenderness in sacral region, with some pain in right hand;—applied cups over sacrum; drew about three ounces of blood; ordered Dover's powder, ten grains, to be repeated in three hours, should the first not allay the pain. (Bowels had been acted upon freely by yesterday's prescription).

28th. Found patient same as before, though right hand more involved; bled from the arm ten ounces; epsom salts, with ℥ss of the wine of colchicum seeds.

28th, 10 P. M. Called in haste; parents supposed her dying; found her suffering from effects of a severe attack of nightmare, and, on inquiry, learned that she was subject to it.

29th, M. Some fever; pain and swelling in her foot entirely subsided, but had increased in her hand.

29th, P. M. Left foot somewhat involved; patient grows worse continually; determination to head.

30th, P. M. Saw Dr. B. Ayer in consultation; discovered symptoms of chorea sanctiviti; also found tenderness from narcka to sacrum; we further learned from her mother that her catamenial discharge had last made its appearance about Christmas, and that she had never been regular, sometimes missing two or three months. This night was spent in trying to allay the chorea by giving Hoffman's Anodyne, Spts. Nitre, Camphor, etc., but with no effect. She grew worse.

31st, M. Ordered calomel and aloes, each twelve grains, to be followed in four hours with a dose of castor oil and spirits turpentine.

Feb. 1st, M. Bowels had been acted upon freely; pain and swelling entirely subsided; some fever; chorea increased. Same cathartic, to be followed as before.

Feb. 2d, M. Bowels had been moved twice; symptoms, same as yesterday; ℞ opium gr. j camphor gr. iij, to be given every two hours, to commence at 7, P. M., and to be continued until four doses had been taken, or it had procured sleep. At 10 o'clock patient fell asleep for the first time since the night of the 29th January; chorea same as when awake, principally confined to right side.

Feb. 3d. Patient somewhat refreshed; fever not so high, though left side involved in the dance; treatment same up to 9th; no abatement of chorea; has slept but little since the night of the 2d; has been in continual motion without a moment of intermission since 30th Jan.

Feb. 10th. Saw Dr. Ayer again in consultation; ordered Tinct. Ferri Mur gtt xv three times daily.

Feb. 11th. The patient worse; great determination to the head.

Feb. 12th. Symptoms of Pericarditis, with great determination to the head; discontinue iron; wet cold cloths kept to her head, and the following mixture to be given: camphor water ℥ij, wine of colchicum seeds ℥ss, tartar emetic grs. iii, a teaspoonful to be given every three or four hours.

Feb. 13th. Patient had rested better last night than usual; fever not so high; skin moist; same treatment, and wet cloths applied as before, should there be determination to the head.

Feb. 14th. Had slept better last night than usual, and when asleep the twitching ceased, but returned on awaking; chorea seems to be abating except in the muscles of the face and neck; patient on attempting to speak has bitten her tongue so much that she seldom will attempt it; she has great dread of fluids; can hardly be prevailed on to drink water, or take her medicine; has become very fretful; ordered same mixture and bowels to be kept open with epsom salts and wine colchicum seeds.

Feb. 15th. Patient seems to be improving, though slowly; she is in continual motion when awake; pericarditis better; has had occasional attacks of nightmare; treatment same.

Feb. 16th. Slightly better; treatment same; saw her twice daily up to the 20th, when disease had become remittent; she would complain of feeling a cold sensation, as if cold water had been poured upon her back; her feet and hands would then become cold, and in a short time the fever would rise and the dance would be as bad as ever until about midnight, when she would have profuse perspiration; by 2 o'clock she would be perfectly still, free from fever, and asleep; and on awaking in the morning she would be nearly free of the dance, except when she was fretful, which was not seldom; she now had marked symptoms of hysteria.

This state of things continued up to Feb. 25th, the fever rising every day about one or two o'clock, and subsiding about midnight, though by this time it had nearly assumed the intermittent type, and would probably have done so entirely, could I have kept off visitors.

I will here state that she had not the least power of controling her muscles, but, on the contrary, when visitors were present, and she attempted it, she got so much worse that we were compelled to remove her from their presence;—same treatment with an occasional pill of assafœtida.

Feb. 26th. Ordered quinine and capsicum equal parts, five grains, to be taken every two hours, commencing at 7 o'clock in the morning, until three doses had been taken.

Feb. 27th. Patient worse last night; fever high; great determination to the head, so much so that we had to keep cold water applied to the head; though free from fever this morn-

ing. ℞ quinine and capsicum as before, commencing at six o'clock.

Feb. 28th. Patient missed fever yesterday; seems much improved; ordered quinine and capsicum as before, and dose epsom salts, with half dram wine of colchicum seeds to be given at night. Saw her next day much improved; quinine to be given in three grain doses, morning, noon and night; bowels to be kept open as before.

Persons frequently lose more flesh in three or four days' sickness than she has in upwards of four weeks, and in almost continual motion, with very little aliment. She continued to improve up to the 8th of March, when I discharged the case.

She has enjoyed unusually good health to this time without the least symptoms of a return, either of rheumatism, chorea, dysmenorrhœa, or any other disease whatever. It is now 25th April, 1859.

I leave it without other comment than that I am fully of the opinion that rheumatism was the prime evil, and the wine of colchicum seeds the instrument that removed it.

HONOR TO WHOM HONOR IS DUE.

We have observed that nearly all the daily papers, and many medical journals, in noticing the death of the late Dr. P. C. Gaillard, speak of him as the founder of the Charleston Medical Journal and Review.

We feel it to be our duty to correct this error, and do justice to those who really deserve the praise attaching to the inception of so laborious and hazardous an undertaking. To Dr. J. Lawrence Smith, the now distinguished Professor of Chemistry and Toxicology in the University of Louisville, and Dr. S. D. Sinkler, since deceased, belongs the credit of having established this periodical, known at first as the Southern Journal of Medicine and Pharmacy. Any of our subscribers who will turn to the volumes edited by those gentlemen, will see what contributions of time and talent they made to its support, and Dr. Gaillard, their able successor, would have been the last to deny the value of the obligation under which, at that period of scanty journalism, they laid the whole southern profession.—*Charleston Med. Jour. and Review.*

Editorial Department.

There seems to be a disposition on the part of many to depreciate the power of the American medical Association, and the veneration which once characterized their allusions to it, and the attention which formerly they bestowed on its meetings, seem to be replaced by flippancy and indifference. The cause may be sought either in the Association itself, or in those who cavil at it, and but little diligence might be necessary to divine exceptionable points in each.

A parent who seeks to train a child by carping at his faults without intimating a mode of correction, will assuredly find his child always erring. On the other hand, he who, by precept and example, inculcates right and justice, who encourages that which is commendable and kindly remonstrates against error, will educate his to be a blessing to society and an honor to his instructor. Principles which are applicable in the conduct of a family may, with great propriety, be adopted in social life, and guide us also in fostering local or national societies which require to be managed with judgment as well as interest. It is infinitely easier to point out a thousand faults than to correct one, and at the same time it is much more praiseworthy to seek the correction of that one, than to harp upon the others.

For ourselves we object to many features of the Association and will briefly allude to some of them.

Under the present system the president of that body might possibly be elected by his own vote. Again: the childish rule of selecting that officer from the place in which the meeting is held obtaining, and the equally objectionable habit of allowing a member of the nominating committee to name his favorite, and have the whole committee blindly respond, amen! and then have the Association as blindly echo the action of the committee, constitutes a series of farcical operations which sadly detract from the dignity of an office that was intended to be national, but may become reduced, under this rule, to

one within the gift of a local clique or political coterie. That such a result has not supervened is not a sufficient guarantee that it will not. We object, also, to the manner in which committees are appointed, and contend that under the present practice an empiric may be named as a committee of one to report at an ensuing meeting upon a grave medical or surgical subject by simply intimating his willingness to enlighten the benighted medical profession. We object, also, to the manner in which gentlemen become members of the Association. As it is, the abstract fact of being a member, is not more than presumptive evidence of being entitled to the name of doctor. We will go further, and assert that all members are not, even now, doctors of medicine;—still, we would rather lend our mite toward the correction of these evils, than assail the whole body and the whole system because of their existence.

The design of the Association is good. Its moral power is augmenting, and it is because the irresistible current of that power is being made manifest, that so many small fry, who have been heretofore swimming in shallow water, under the name of Tritons, now fear the issue which they may defer but can not avert. Perhaps, too, when its waters have laved the surface of some medical colleges hitherto of comparatively good repute, we may discover some foul sores and indolent ulcers which need cleansing, however happily their possessors may nurse and foster them, as necessary drains or kind derivatives.

A denial of the right of that body to interfere with the troublesome subject of medical education should, to be consistent, carry with it a general denial of the right in any person, combination, corporation, or government whatever, to control or direct medical teaching, for surely, if a body such as the Association was designed to be, may not be trusted with the sanitary interests of the public as well as with the interests of the profession, we are at a loss to know what the other power may be. Again: the extreme jealousy manifested on this subject augurs the existence of evils which will not shine with beauty through the light of revelation, or reflect creditably upon those who endeavor to conceal them To be influential, we must be ethical and consistent. If we denounce the system of newspaper puffing as contrary to professional propriety, and exaggera-

tion and deceit as contrary to principles and honor, we certainly ought not to practice what we so urgently condemn. The profession should be able to turn to the teachers and expect from them at least practical evidence of hatred to every thing savoring of charlatanry, but what they should expect, and what they would find, are distinct propositions. The truthfulness of catalogues, the actual number of matriculates, as compared with the published lists, the many graduated who had not attended lectures, the proportion of tickets gratuitously distributed to keep up appearances, and many other like inquiries, might lead to replies which, if candidly given, would startle the uninitiated and lukewarm, and display some of our flash colleges in their true colors. The poor-house pauper has an interest and a right in this matter; the fish-women and scavenger have an interest and right in this matter; the commonest citizen, the most abject menial, as well as the princely merchant and haughty millionaire, have an interest and a right in this matter; and shall it be denied to those strangely called laymen in the profession? shall it be denied to an honorable body, representative in its character, just in its principles, steady in its purposes, and presume to epitomize the general sentiment of the medical profession of the United States? We would not willingly use language calculated to offend or irritate, and if we could find a milder term than arrogance, which could as well convey our meaning, we would use it, but necessity constrains us to say that we deem it gross arrogance in those colleges who stand aloof from the Association and deny it the right which they must accord to the humblest of their fellowmen.

In this connection we have not intended, nor do we design to intimate any course of action which the Association should adopt; we only contend for its right to act. We are proud of our connection with an institution which has nothing to conceal, and does not fear the blaze of day; but if it were not so, we would hope for that moderation and wisdom on the part of the Association which would forbid any action having retrospective influence.

The past is irrevocable, but the future is before us. Let us, then, not only hope but act, so that our hopes may be realized.

GLEANINGS FROM FOREIGN JOURNALS.

Address by Sir John Forbes, M.D., D. C. C., F. R. S.—This is an address replete with excellent counsel, sound doctrine and kind reproof. He is thoroughly conservative, for while he tells the students, "Where you are certain that any medicine is beneficial, it is your duty in any severe or dangerous case, to employ this in the manner and the dose that science and experience have shown to be the most effective. In such a case let there be no hindrance as to the frequency of its repetition, whether it be four, six or ten times a day—or even every hour—if necessary." He still reminds them that "In former times the practice of medicine was in a great measure empirical, or at least traditional. It was assumed that for every particular disease the administration of some particular drug, some so called remedial measure, was the proper practice; in so much that the very name of the disease sufficed to show what was to be the treatment. The power of nature in repairing what was wrong in the body, was entirely ignored, and an endless administration of drugs was believed to be essential. Although with many practitioners this is still unfortunately the case, those really learned in their profession prescribe more according to knowledge and belief of the actual changes that exist in the diseased body, that is, according to their knowledge of physiology, pathology, and rational therapeutics, and with a degree of success, in most cases, proportionate to the improved knowledge of the prescriber. One of the most striking features of this system is the comparative paucity of drugs, deemed necessary to the cure of diseases. This mode of treatment, which may be called *rational* or *physiological*, I know you have been taught in this school; and it is to be hoped that it will never be superseded in your minds, by the old *empiricism*." He thus concludes his admirable address: "Be assured, my young friends, and believe the words that come from a professional experience of more than half a century, that to be a successful and happy medical practitioner—virtue, a good character, and a kind heart, are as necessary as knowledge and skill."

The Board of Trinity College, Dublin, has recommended its students to take out a course of opthalmic surgery.

Frommuller strongly recommends touching these with a solution of sulphate of copper, or employing a garde of one grain to the oz. Amongst the quicksilver workers this is regarded as a specific.—*Frorieps Notizen*, 1859.

We do not see any thing new in this suggestion, we were taught the value of the application by our preceptor fourteen years ago.

Uses of Vaccination.—Small pox has been raging in the colony at the cape: but of the large number of persons, of all ages, who have insured their lives in the colony, it is stated that not one has been affected by this epidemic. Vaccination is made a condition of insurance.

Chloroform.—M. Baudens, in his account of the campaign in the East, asserts that although chloroform had been employed thirty thousand times in the French army there, no fatal accident had ever resulted from its use. Dr. Rizet, of the Chasseurs, denies this. Two deaths occurred under his own observation: one at the hospital Ramitchifflick, and another at Gulphane.

Dust Floating in the Air.—M. Pouchet finds that the dust floating in the air contains the detritus of the mineral constituents of the globe, atoms of animals and plants, and the finest debris of all the matters we make use of. But one item he especially points out, viz., *wheat starch*, which is invariably found in the dust whether old or recent. Surprised at the quantity of it present among the ærial corpuscles, M. Pouchet investigated the dust of all ages and of every locality, and everywhere he found this wheat starch presented. "I have found the starch in the most inaccessible corners of old Gothic churches, mixed with dust blackened by six or eight centuries of existence. I have found it in the palaces and caves of the Thebiad, where it may have dated from the time of the Pharaohs? I have found it in the tympanic cavity of the tympanum of a mummified dog, which I had found in a subterranean temple of Upper Egypt. In all countries, in a word, where wheat forms the staple of food, starch always penetrates into the dust, and is met with in greater or less quantities. Hence therefore, the *corpuscles* of which we have heard so much, are granules of starch and silica.

Twice only in a thousand experiments has M. Pouchet observed the large ova of infusoria in the atmospheric dust.

Suppression of the Lochia.—M. Ronzier Joly has found their reproduction much facilitated by the patient taking strong infusions of the Achillea Millefolium.

Poisoning by Arsenic.—The Medical Times, in alluding to a case of suspected poisoning by arsenic or antimony, or both, says: "Some curious medico-legal questions will arise, as the deceased is said to have taken bismuth, sulphate of copper, nitrate of silver and acetate of lead prescribed medicinally. In America, last year, a person was acquitted of the charge of poisoning by arsenic, on the evidence of Professor Rogers of Philadelphia, who found arsenic in every specimen of bismuth obtainable; the deceased in that case having taken bismuth as a medicine."

Mortality of Children in Russia.—A terrible picture of the mortality of children in Russia is given in a Journal called the Rousky Dnlvnik. Many more than one-half of the children born in that country die in the very earliest period of infancy. One-eighth die between the ages of 5 and 10, and another eighth between 10 and 20; thus three-fourths perish before reaching mature age. The ignorance and superstition of the lower classes of people have in many instances a most fatal influence on the management of children.

Nitric Acid in Hæmorrhoids.—Dr. H. Smith, F. R. C. S. has published a pamphlet in which he claims great success from this application. He maintains that it possesses great advantages over the knife and ligature, not the least among which is the contraction of the cicatrix which acts as a band or support to the part.

Singultus and Borborygmus.—Dr. Wolff states that he has frequently relieved obstinate hiccough occurring in diseased and other conditions, by the following procedure. The patient must take a deep inspiration, and then keep the abdomen forcibly expanded, as when straining hard at stool, giving way to the necessity or respiration as seldom as possible, and then by rapid inspiration. It requires some practice before success can be obtained. The same process is of great use in the borborygmi to which ladies are often subject.—*Deutsche Klinik.*

We think a more effectual method of restraining hiccough is by pressing firmly on the phrenic nerve as it passes over the scalenous muscle.

Bad Vaccination.—In the course of 16 years, out of 3098 cases of small pox which had been brought under Mr. Marsden's notice at the small pox hospital, there were only 268 in which the marks of good vaccination occurred, and of these 268, only three cases died, showing the value of good and the prevalence of bad vaccination.

URETHRITIS TREATED BY PRESSURE.—M. Thiriaux (Presse Belge) says: "Every one is aware how obstinate Urethritis frequently proves in women; and the persistence of the inflammation may give rise to various attractions, the most frequent of which are, engorgement of the sub-urethral cellular tissue, deviations of the canal, and the formation of culs-de-sac in which the matter accumulates. Pressure made under the urethra will then present a quality of pus, the existence of which mere inspection could never have made known. These engorgements and collections, in their turn, become the means of keeping up the irritation and inflammation, especially when the practitioner is not aware of their existence. These obstinate cases are then best treated by making sub-urethral compression by means of a plug of tow or charpie. This mode of treatment, M. Thiriaux has long followed with great success—whether as the sole, or as a powerful auxiliary means. A firm plug, of a suitable size is introduced into the vagina, so as to take its point of support at the posterior commissure, and press the urethra against the pubis.

QUACKERY AND IMPRISONMENT.—In Italy, as well as in France, authority is silencing quackery. Signori Rocca and Filippa have just been summoned before justice at Turin, and been fined 300 francs for practicing medicine illegally, and advertising that they can cure all kinds of diseases by magnetism. In addition to the fine, they have to undergo six month's imprisment, and to pay the expenses of their own prosecution. Mrs. Hubson, a London midwife, has been committed to jail for manslaughter, because she mismanaged a case of midwifery in which the placenta was retained. The patient died under her hands of hemorrhage. The error which she committed does not appear.

ENLARGED TONSILS VERSUS CROUP.—"M. Ottenbourg informed the Medical Society, of Paris, that observation has led him to the conclusion, that permanent enlargement of the tonsils protects against croup. Children exposed to the infection of croup, having enlarged tonsils, escaped the disease, while others without hypertrophy of these organs contracted croup.

This view of the matter has led M. Ottenbourg to this practical result. He advises the parents of children not to allow their enlarged tonsils to be removed." We are inclined to think, however, that the negation evidence upon which he has based his conclusions is insufficient.

SEMI-MONTHLY MEDICAL NEWS,

Of Louisville, Ky., is out with a spirited article denunciatory of the Kappa Lambdas, for whom, it seems, nobody has a word, as they are confessedly indefensible, and hence their ominous silence. But we are tempted to remind the Dr. *B's*, our confreres, that the newspaper puffs of a certain Louisville professor, who shall be nameless, for the radical operation in hernia, and claiming for him, so flippantly, merit, and even novelty, apart from being ludicrous, are quite as unprofessional as K. L.-ism, or any other of our New York delinquences. We pause for a reply.—*American Med. Gazette.*

Within the past few months a highly respectable journalist of a neighboring city has published a biting paragraph in reference to a member of the profession in this city, whose name has been associated with quack advertisements, and we forebore either to copy or in any other manner call attention to it. It may be true, as our friend of the Gazette seems to think, that we are more ready to remove motes from the eyes of our brethren of New York than to cast the beams from the eyes of the profession of this city. It certainly does not afford us any gratification to expose faults in those with whom, from mutual proximity, we would desire to be on terms of agreeable intercourse and comity. Otherwise some very glaring departures from the "code" would not have passed without rebuke.

But our friend has so ingeniously constructed his allusion to a publication of recent date, that we are obliged, in self-defense, to copy his paragraph, and to ask him to do us the justice to assure his readers that the dereliction in question does not attach itself to us or to any of our colleagues.

At the request of the editor we insert the following notice of his excellent journal:

NOTICE.—The delay in the issue of the June number of the

"*North Carolina Medical Journal*" has been unavoidable, so far as the undersigned is concerned. The publisher, and not the editor, is responsible for the tardiness of its appearance, as well as for all the typographical errors it contains.

In order to complete the arrangements necessary for the publication of the "Journal" in Edenton, the first number of the succeeding volume will not be issued until September.

All who have not paid their dues, and those who wish to continue their subscription to the "Journal," are earnestly requested to forward the requisite amount immediately, as a considerable outlay is necessary to secure the future success of that publication. EDWARD WARREN, M.D., *Editor.*

Edenton, July, 1859.

JOHN E. CROWE, M.D., has been appointed Assistant Demonstrator of Anatomy in the Medical Department of the University of Louisville. The Faculty are determined to make the anatomical department as superior in its attractions as the building is superior in its accommodations, and the appointment of Dr. Crowe is an evidence of this determination. Physicians who desire to renew their acquaintance with anatomy privately, may have an opportunity of doing so, without having their names paraded as students or matriculates, by applying to the Dean of the Faculty.

A History of the Discovery of the Circulation of the Blood. By P. FLOURENS. *Translated from the French by* J. C. REEVE, M.D.

This little volume is one of the most interesting which we have perused for a long time. Its terseness and perspicuity of style command your attention, and the more you read of it, the deeper your interest becomes. Tracing the views of Erasistratus, Galen, Servetus, Columbus, Cæsalpinus, Fabricius, Sarpi, and many others, the author says:

"Harvey demonstrated the circulation of the blood; but he came from Padua, where Fabricius, who had discovered the valves of the veins, was his teacher; in this same university of Padua where were formed the germs of all Harvey's ideas, Realdo Columbus, who discovered the pulmonary circulation, was but a short time before professor; and Padua is not far from Pisa, where Cæsalpinus, by the light of genius caught

sight of the pulmonary circulation, and by a brighter flash of the same divine fire saw the general circulation.

"In the discovery of the circulation, the point of difficulty was to unite the diverse observations successively made, or so to speak, the different pieces, into one whole; the difficulty was to comprehend the phenomena and the whole of the mechanism united together; and it is because Harvey was the first who clearly and completely comprehended this whole that the glory has remained his."

To be had at Maxwell & Co.'s

REPORT OF THE COMMITTEE ON DR. PIRTLE'S COMMUNICATION.

The committee to whom was referred the communication of Dr. J. R. Pirtle, relative to a case of calculus in the bladder of a female, beg leave to report—

That they are fully satisfied that the fragments submitted to them did compose a phosphatic urinary calculus, having for its nucleus a deciduous molar tooth. The explanation offered by Dr. Pirtle as to the mode in which the tooth found its way into the bladder is naturally suggested by the position of the stone and the apparent fixation of its dental nucleus in the fundus of the bladder. But assuming that there was no deception in the observation, the facts of the case are susceptible of a different explanation, which appears to us much more rational—namely, the calculus may have found its way into the bladder through its usual channel, and become encysted where it was detected. To say nothing of the improbability that a tooth, taken into the alimentary canal by the stomach, should become entangled in the folds of its mucous membrane, and set up sufficient inflammation to establish adhesion between the bowel and bladder, resulting in perforation by ulcerative absorption, it can not be believed that it could have become fixed in such an aperture so firmly as to resist the strong tractions made with the forceps for its removal. Besides, had such an opening existed, urine must have escaped into the bowel and fæces into the bladder.

In all the instances on record in which foreign bodies have been found in the bladder as the nuclei of urinary concretions,

it is well known that they have been introduced by the patients themselves through the urethra, and there is no reason to suppose that Dr. Pirtle's patient is an exception to the rule, notwithstanding her ignorance of anatomy, seeing that an intimate acquaintance with the structure of the body is not essential to such an achievement. If the tooth was introduced by the urethra, it was contained, of course, entirely in the bladder—fang as well as crown—and though the fang may have been imbedded in the calculus as well as the crown, its smoothness might have prevented an intimate adhesion of the urinary deposit, and consequently when the stone was broken by the forceps, the calcareous incrustations cleanly detached from the fang while it continued to adhere closely to the rougher surface of the crown. This is much more probable than that a fistulous opening existed, for many years, between the bowel and bladder, the vesical aperture of which was occupied by the fang or fangs of a tooth, according to the idea of Dr. Pirtle; for if such was the actual position of the tooth, why, it may be asked, did it resist the traction of the forceps and yield only to torsion? It can not be imagined that it had contracted a vital union with the supposed fistulous tract, and it would seem, therefore that there ought to have been no difficulty in bringing a fang through an opening from which the crown projected into the bladder.

On the whole, it does not appear to the committee that Dr. Pirtle's case differs from similar ones in any particular, save that it had a tooth for its nucleus.

H. MILLER,
JNO. HARDIN,
M. GOLDSMITH.
Committee.

Our contributors will please favor us again with short articles upon any subject of practical interest, such as accounts of cases, epidemic tendencies, critical notices of medical matters, etc. We have no doubt but that our readers, like ourselves, would be gratified to hear again from "Squills," from "Straight," and from "Fair Play," *et omne id hoc genus.*

Semi-Monthly Medical News.

VOL. I. LOUISVILLE, KY., AUGUST 15, 1859. NO. 16.

Report on Ovariotomy, *read before the Kentucky State Medical Society, at its annual meeting at Louisville, April*, 1857. By J. Taylor Bradford, M.D., *Augusta, Ky.*

"Go to the Parthenon and find, not what bunglers, but what great men have left undone."—Sculptor to his Pupil.

As the tumor increases in size, it maintains a rounded outline, and is uniformly dull over that region by percussion, in whatever position the patient may be placed. As it ascends from the pelvic cavity to the abdominal, it rises in front of the bowels; and in proportion as it extends to the opposite side from which it made its appearance, and spreads out over the bowels, will the dullness be observed by percussion in the same ratio. The intestines lie under or behind the tumor, whilst in ascites they float on the top of the liquid, containing, as they always do, more or less gas. In the former we have the dull sound peculiar to ovarian tumor, while in the latter the sound on percussion will be *resonant.*

The more advanced the disease, and the larger the accumulation of liquid, the *thinner* and tighter are the walls within which it is confined, and the more distinct the fluctuation. "Even when the quantity is small," says Dr. Watson, "not exceeding a few ounces, a little practice and management will enable you to detect it. Percuss with one finger the most dependent part of the cavity, and apply at the same time a finger of the other hand very near the part struck; and if liquid be there, you will perceive a limited, yet a distinct fluc-

tuation. In the same way, the presence of liquid in a small cyst may sometimes be ascertained."

The veins of the abdomen are increased in size and number; this, however, is not so marked until the tumor has attained considerable size.

The *uni-locular* cysts present a uniform surface, whilst the *multi-locular* have an uneven and irregular surface. In the uni-locular cyst fluctuation is distinct from one side of the abdomen to the other, and generally per vaginam also; whilst in the multi-locular it is distinct only over a particular part of the abdomen, in the immediate part of that particular cyst. I remember to have examined a case where fluctuation could not be felt from one side of the abdomen to the other, but was distinct in a certain space on both sides. It was not perceptible per vaginam, from the fact (as it proved afterwards) that the tumor consisted of three cysts, one occupying the pelvis, and one on either side of the abdomen. In this case the womb was thrown back upon the rectum, (as it often is), and the uterine sound could not be easily introduced until an assistant, standing by the side of the patient, placed his hand in front of the tumor and lifted it up with considerable force.

By this manœuver of an assistant, if we retain our finger in the vagina, and there are any considerable adhesions to the womb, or the tumor is part of the womb itself, the womb will sometimes be lifted nearly or quite out of the reach of the finger.

When the vagina is elongated and drawn up under the arch of the pelvis, or the uterus thrown back on the rectum, with an assistant stationed as above, we will be better enabled to use the uterine sound, and push the womb from side to side, if there be no adhesions. When it is remembered that the most fatal adhesions are generally found at the base of the tumors, we can not exercise too much caution in this part of our examination. In the diagnosis of uterine, and non-uterine tumors, I have found the uterine sound at times indispensable. And here allow me to describe its use in its inventor's (Prof. Simpson) own language.

"It may be used in one of three ways:

"1st. The uterus may be retained in its situation, with the bougie, and then, by the assistance of the hand above the

pubis, or by some fingers in the vagina, the tumor, if unattached to the uterine tissue, may be moved away from the fixed uterus.

"2d. The tumor being left in its situation, it may be possible to move away the uterus from it to such a degree as to show them to be unconnected.

"Or, 3d. Instead of keeping the uterus, both may be moved simultaneously; the uterus by the sound, and the tumor by the hand or fingers, to opposite sides of the pelvis, to such an extent as to give still more conclusive evidence of the same fact."

When the tumor is small, by introducing the middle finger into the vagina and the thumb into the rectum, we will be enabled to feel an elastic, egg-like tumor between the rectum and vagina. It is sometimes slightly painful and tender, but again there is no uneasiness manifested to the touch.

Dr. Churchill, in his diseases of women, says: "If the finger be introduced into the rectum past the tumor, we shall find the fundus uteri, and be able to distinguish it from the enlarged ovary. This is very necessary, or we might conclude the case to be retroversion of the womb. In addition, it may perhaps enable us to decide whether one or both ovaries are diseased."

"It should be remembered," says Dr. Brown, "that hernia may descend between the vagina and rectum, and feel like a tumor in that region; but in the absence of symptoms of strangulation, we must distinguish it from the ovarian cyst by the effort of coughing and change of posture, and by being unable to pass the finger beyond the tumor."

The pressure of the tumor in the pelvic cavity sometimes gives rise to difficulty in voiding urine, torpidness of the bowels, etc. There are sometimes occasional symptoms of pregnancy, morning sickness, enlargements of the breasts, and sometimes violent pains set in, resembling labor pains. Here the stethescope is our guide, together with the time which has elapsed since the commencement of the disease. A young lady, upon whom Dr. Dunlap and myself operated, presented some of the above symptoms, and it produced no little commotion in the community among whom she lived.

There is another means of diagnosis and examination to which I invite your careful attention and cultivation. It is

the sense of touch, or pressure upon the abdomen with the ends of the fingers. If we percuss or press firmly, and in quick succession, with the ends of the finger over an ovarian cyst, there is, at the cessation of percussion or pressure, an elastic sensation—a rebound to the sentient extremities of the finger—a resisting or reflecting back of the finger in the distended cyst; whilst in ascites there is not the same elastic response to the finger. In fibrous tumors and enlargement of the spleen, there is a doughy, fleshy sensation to the finger, which is more easily felt by the practiced finger than described. This means of diagnosis requires practice of the fingers, as it does to distinguish the different shades of the pulse. Of this diagnostic sign, Dr. Watson says:

"If you press suddenly with the tips of the fingers in a direction perpendicular to the surface, a sensation which it is difficult to describe in words, yet which is quite decisive and not to be mistaken, a sensation of the displacement of liquid and of the impinging of your fingers upon some solid substance below."

The same writer further states in reference to the senses:

"You will find what previously to positive trial you might not suspect, that the senses—the eye, the ear, the touch, however sharp or delicate they may naturally be, require a special course of training and education, before their evidence can be trusted in the investigation of disease."

Dr. Latham says (I quote from Bennett) with equal truth, that the "knowledge of the senses is the best knowledge, but the delusions of the senses are the worst delusions."

Swelling of the lower extremities we sometimes meet with, both in early and later stages of the disease. This originates from the pressure of the tumor upon the vessels which return the blood to the heart. See case of Mrs. Williams, of Indiana, and Mrs. Martin, of Maysville, Ky. In the latter case, ascites, swelling of the limbs, and ovarian tumor coexist.

When we have diagnosed the disease as ovarian tumor, next in importance is the extent of adhesions and the prospect of its removal. Perhaps the guide of no author is better, or the experience of any individual more to be relied upon, than that of Mr. Brown, of Edinburg, in his tests for

adhesions. After placing the patient on the back, with the extremities fixed, so as to relax the abdominal parietes, he directs the cyst to be moved from side to side. If this were readily done, he knew that there were no adhesions. He then pressed firmly over the relaxed parietes, and moved them over the cyst; if they were readily moved, he knew there were no adhesions on the upper and lateral surfaces of the cyst. He then grasps and puckers up the parietes, and moves them over the cyst, and saw if they were gathered up readily, without raising the cyst itself. He then requires the patient to take a full inspiration, and if there be no adhesions in front, the upper boundary of the cyst descends to the extent of an inch, the place previously occupied by the tumor being taken up by the intestines, a dull sound over that region is elicited by percussion during ordinary respiration; but when the patient takes a deep inspiration, an intestinal resonance is there perceptible.

"Freedom of motion in the tumor," says Dr. Layman, "though not altogether decisive, is indicative of the absence of adhesions." It is now one of the fixed facts, that the most dangerous and insuperable adhesions are generally found at the base of the tumor, and found, too, when the tumor is easily moved from side to side. The case of Dieffenbach, Berlin, is in point. Here the tumor was movable in every direction, and partly on its own axis even; the operation was commenced, but abandoned, on account of the difficult adhesions to the vertebral column. The patient after much difficulty recovered.

We might also refer to the case of Page, where the tumor was movable, operation commenced, cyst evacuated and drawn partly out, when it was found adherent to the "surrounding parts about the pedicle, and to several inches of intestines." The operation was abandoned, and the patient died.

If I can satisfy myself (and I generally can by the uterine sound and by other means) that the adhesions at the base of the tumor are not insuperable, the immovability of the upper portion would not always deter me from an operation. See the case of Dr. Dunlap and myself, Mrs. Lastley, Portsmouth, Ohio. Twelve months before Dr. Dunlap and I

performed the operation, Dr. Kimbro, of Lowell, Mass., attempted the operation and opened the abdomen; but finding, as he did, a mass of adhesions at the superior part of the tumor, abandoned the operation and closed up the wound. In this case the upper part of the tumor was immovable, but after a careful and diligent examination by both of us, we decided that the adhesions at the base of the tumor, if any at all, were very slight. The case was successful, but required the application of twelve ligatures to the superior adhesions, which were principally peritoneal. It gives me much pleasure to state that this accomplished lady is now (nearly a year after the operation) in good health.

In another case of Dr. Dunlap's and mine, Mrs. Kamsey, of Winchester, Ohio, operation performed November 15, 1855, a large multi-locular tumor, weighing sixty pounds after its removal, so completely filled up the abdomen and packed itself into the pelvis, that it was impossible to ascertain the extent of the adhesions. Fluctuation, however, was distinct in each cyst, and after discharging their contents, we came upon one of several adhesions near the pedicle, which was attached to the peritoneum with a tapering neck as it neared the tumor, so much so, that a shoulder or button-like piece was dissected out of the tumor to prevent the ligature from slipping off. The case did well, and the patient is now in good health.

A further test of Dr. Frederic Bird for superior adhesions I have found to be a valuable one, namely, by putting the abdominal muscles in action, and noticing whether they rise much from the surface of the tumor. Thus, if the patient, while lying on her back, be told to raise herself up in bed without using her arms, the recti-muscles will start up into a prominent band, if their sheath is not tied down by adhesions on its peritoneal surface, but not if it is tied down.

Dr. Washington Atlee, in an article published in the American Medical Journal, places considerable reliance on the pulsation of the tumor itself, or the "aortic impulse as being more manifest in solid or encysted growths than in cases of ascites.

Before I leave this part of our diagnosis, I wish to say an additional word in reference to percussion. Among those who

are expert in their perception of ovarian tumors (and they are few and far between), perhaps as much, if not more, importance is attached to the use of percussion than to any other symptom or set of symptoms. We have, over the umbilical region, in ovarian tumor, in whatsoever position you place the patient, a dull sound on percussion; whilst in one or both of the flanks we have the resonance peculiar to the intestines. This diagnostic evidence is, perhaps, ninety-nine times in a hundred correct in reference to tumors. Dr. Watson, however, gives us an anomalous case, which is a rare illustration as an exception. "The history of the case was the history of ovarian tumor;" yet, continues he, "the umbilical region, when percussed, always renders a hollow sound." Upon the death of the patient the mystery was solved: air hissed forth from the opening made by the scalpel through the abdominal parietes, and an ovarian cyst of considerable magnitude was found adhering to the peritoneum in front of the belly, and containing no liquid, but some yellowish shreds only. This ovarian bag had been filled with air, which had given rise to the equivocal sounds. The air, it is supposed by the author, was formed from the decomposition of a degenerate cyst within.

I have alluded to the examination *per vaginam et per rectum*, but perhaps not so specifically as its merits demands. You will often be enabled by the finger to detect fluctuation in a cyst, and as frequently to distinguish a fibrous tumor of the ovaria from a uterine one.

Allow me to cite a case: Miss Strader, formerly of Maseon, Ohio, but then of Cincinnati, came to Augusta to consult me about the propriety of an operation for what her physicians pronounced ovarian tumor. On examination I found the tumor occupying the central and right side of the abdomen. It was easily moved in any direction without any apparent pain. There was no fluctuation, and the ease with which the tumor could be lifted up and turned from side to side, made, for the moment, an impression on my mind that (although perhaps fibrous, with a narrow pedicle) it would justify an operation. But remembering my motto, which heads this article on diagnosis, "He that thinketh he standeth, take heed lest he fall," I proceeded to other tests. On introducing the finger into the vagina, I found it completely filled up with an

obtuse lobe of the tumor, dipping deep down into the pelvis. At first I thought it might be retroversion of the womb, but by a rectal examination, I found a smaller lobe pressing upon the rectum, which seemed to sprout off from the lobe in the vagina in a perpendicular direction. I came to the conclusion that it was an *intra-mural* tumor of the uterus, forming in the walls and extending both upward and inward. The patient returned home, but came back a second time, insisting still upon an operation. I wrote a note to Dr. Dunlap, who came and examined the case with me. He formed a similar conclusion to the one I have just expressed. Miss Strader was subsequently examined by Profs. Marshall and Bayless, of Cincinnati, and since then by Dr. Washington Atlee, of Philadelphia, as will be seen from the following note:

"PHILADELPHIA, Nov. 9, 1854.

"*Dear Sir:*

Your patient, Miss Strader, presented herself to me to-day, and upon examination I have arrived at the same conclusion you did—that is, a fibrous tumor of the uterus. The uterus, however, can not be clearly diagnosed, and consequently as the relation of the tumor with it can not be defined, no operation ought to be recommended.

Yours truly,

WASHINGTON L. ATLEE,
418 *Arch Street.*

J. TAYLOR BRADFORD, M.D."

ASCITES AND OVARIAN TUMOR.

The distinguishing characteristics of ascites as compared with ovarian tumor are important. It is not always an easy matter to distinguish between the two, and it has once occurred to me to encounter more difficulty in deciding between ascites and ovarian tumor, than it was to establish a correct diagnosis between uterine and ovarian disease.

In the maturity of both diseases, when the abdomen is distended to its utmost, many of the symptoms which assist and guide us in the early stages, are lost. The ovarian cyst then loses its circumscribed and lateral preponderance, and accommodates its growth to the inequalities and recesses of the abdominal cavity.

In the earlier stages of ascites, we generally find an equable enlargement of the abdomen on both sides, whilst in ovarian tumor the swelling is circumscribed, and confined mostly to one or the other side. In ascites there is more constant and uninterrupted tenderness of the peritoneum by pressing firmly and quickly with the ends of the fingers, whilst in ovarian tumor it is only occasionally the case. In ascites the general health is sooner and more seriously disturbed, whereas in ovarian tumor it often remains good for months or even years. In ascites the secretion from the kidneys is usually scant and defective, whereas in ovarian tumor, except in the rapidly enlarging cases, there is but little change. In ascites we find the patient oftener with a dry skin, thirst, and a more frequent and irregular pulse, whereas in ovarian tumor they are only occasionally if at all present. In ascites we can generally trace the cause of the distension to some cardiac, renal, hepatic, or other organic affection, whereas in ovarian tumor, if of long duration, the mystery is how the patient carries 20, 30, 40, or even 60 pounds, without constant complaining. In ascites the bowels, always containing more or less gas, float to the surface of the fluid, whilst in ovarian tumor they lie behind or underneath the tumor. We have then on percussion in ascites, whatever position the patient assumes, the resonant or hollow sound peculiar to the intestines, (which remain uppermost), with corresponding dullness below. In ovarian tumor we have the dull sound over the region of the umbilical or latero-umbilical and latero-pubic, in whatever position the patient may take; or, as Mr. Brown more strikingly describes it, "want of resonance in the lowest part in all positions, with tympanitic sound in the highest in all positions, indicates ascites."

To these characteristics, usually considered so important, Dr. Watson has given us some anomalous and interesting exceptions. In one case the distension in ascites was so great that the mesentery was not broad enough to allow the buoyant intestines to reach the surface, when the patient was supine. In this case then, instead of the resonance peculiar to the intestines, it gave a muffled or dull sound.

The second case was found, upon post mortem examination, to be ascites, where the "omentum had formed into a

thick cake," and was "strapped tightly over the subjacent intestines. Here, of course, we would have a dull sound, although ascites existed.

He alludes to another possible contingency, in which the sounds by percussion would be equally deceptive. This may occur in consequence of the "adhesion of the various coils of intestines to each other, and the parts behind them." Such cases, however, fortunately for the diagnosis of ascites, are very rare, and I do not know a single author, save that rare teacher and profound thinker, Dr. Watson, who has met with them.

I have now a patient, Mrs. Kenyon, opposite Vanceburg, Ky., whose abdomen is very much distended, and the history of whose disease is purely ovarian. It has been of nearly three years standing. The general health is but very little disturbed, and the sound elicited by percussion over the entire abdomen is resonant, except occasionally, when, just below the umbilicus, a thickening of the parietes, or what feels more like the "omentum cake," takes place, over which a dull sound will be elicited until it subsides, which it generally does in two or three weeks. The usual and generally approved remedies for ascites have not decreased the size of the abdomen. It is clearly in my mind not ovarian, but ascites; but to what may it be attributed?*

When, in either ascites or ovarian tumor, the quantity of liquid is small, fluctuation by the usual mode is not always distinct. In such cases we will find the mode of Mr. Tarral, as detailed by Professor Wood, worthy of use. It consists in applying the thumb and middle finger of the same hand upon the surface, and percussing with the index finger between them.

The test (already alluded to) of Dr. Bird, of London, with reference to adhesions in ovarian tumor, I have found to be one among the most convincing tests in ascites; and I do not now recollect any writer who has alluded to it as one of the tests in that disease. That is, if the patient, whilst lying upon her bed, be directed to raise herself up in bed without using her arms, the fluid will bulge up prominently between, and laterally to, the recti muscles, whilst in ovarian tumor, on ac-

* I have tapped this lady twice, and with the application of a light bandage after the second tapping, she has entirely recovered.

count of the circumscribed sac, it will not admit of such a degree of prominence. The parietes of the abdomen will admit of considerable extension, whereas the sac and the recti muscles will not admit of the same marked protuberance and inequality.

It sometimes happens that ovarian tumor and ascites exist together. I have met with one remarkable case of this kind, Mrs. Martin, of Maysville, Ky. By pressing firmly with the ends of the fingers, the ascitic fluid was readily displaced, and a tumor of the left ovary found floating in the surrounding liquid. The patient was 60 years old, and the disease had progressed so far, and the general health so much declined, that I did not advise or solicit an operation. She lived but a few weeks after I saw her, and no post mortem examination was obtained. In response to a circular addressed to the physicians of Kentucky by myself, I received from Dr. Dimmit, of Lewisburg (an intelligent and promising physician of that place, and whose patient she had been up to the time of her removal to Maysville) the following history of the case:

"I saw her for the first time three years ago, at which time the tumor (occupying the left side) was firm, movable, and dropsical. The disease appeared subsequent to the cessation of the catamenia. Her general health at that time was moderately good. She suffered at times extreme pain in the region of the tumor, at which time a nervous train of symptoms, resembling hysteria, set in."

I saw Mrs. Martin in one of the nervous attacks alluded to by Dr. Dimmit. She would lie for a time motionless and apparently lifeless, but would retain her consciousness throughout the paroxysm. The attacks were superinduced by pain, fright, or excitement of any kind. I merely quote this case to illustrate how unlike different persons may be affected by the same disease, and that ovarian tumor is not without its collaterals and concomitants in the nervous system.

It may appear to you that I have dwelt unreasonably long upon the diagnosis of this "hydra of calamities," and the cases cited by way of illustration may, for the time being, appear irrelevant, but these cases and these symptoms and tests, may one day meet you at the bedside.

DISEASES LIABLE TO BE MISTAKEN FOR OVARIAN DROPSY.

Dr. Brown, in his excellent work on "Surgical Diseases of Women," classes these diseases as follows:

1. Retroversion and retroflection of the uterus.
2. Tumors of the uterus.—*a.* solid, *b.* fibro-cystic.
3. Ascites.
4. Pregnancy.
5. Pregnancy, complicated with ovarian dropsy.
6. Cystic tumors of the abdomen.
7. Distended bladder.
8. Accumulation of gas in the intestines.
9. Accumulation of fæces in the intestines.
10. Enlargement of the liver, spleen, or kidneys, or tumors connected with these viscera.
11. Recto vaginal hernia, and displacement of the ovary.
12. Pelvic abscess.
13. Retention of the menstrual fluid from imperforate hymen.
14. Hydrometra.

A description of these different diseases under their particular class in the different medical works, will generally enable you (if not possessed of the "tumor mania") to distinguish them from ovarian dropsy. I shall only allude to a few of them in which I may have had some personal experience.

From what I have read and observed, I am inclined to the belief that malignant disease of the ovary is very rare. I have met with but one case. This was a patient of Dr. Duke's, of Maysville, the accomplished wife of the Rev. M. Upon examination I found a large, uneven, but solid tumor occupying the left side, and extending up to the umbilicus. It was peculiarly firm, with numerous obtuse lobes projecting upward; rather tender to the touch, and so completely adherent to the surrounding parts, particularly to the womb, that but little if any movement could be effected. An examination per vaginam revealed the same hardened and uneven surface. The pain and suffering were very great, general health bad, and that peculiar cast of countenance which indicates a system worn down by malignant disease. Soon after I saw her, I learned from Dr. Duke

that the tumor had grown so rapidly, and infringed so seriously upon the bladder, that it was almost impossible to pass the catheter, which, for some time, had been the only means of passing urine. No post mortem examination was obtained.

When we add to the above symptoms that in cancerous growths, the tumor is uneven in its growth, the pain and soreness much greater than in other forms of disease, the general cachectic and sallow complexion, the peculiar hardness and rapidity of its growth, the general health and strength soon wasted, we will have but little difficulty in determining its nature.

I have already directed your attention to the case of Prince, where a patient was operated on for ovarian dropsy, which proved, upon post mortem examination, to be a tumor of the spleen.

I was once consulted in a case, Mrs. ——, of Boone county, Ky., which a number of physicians had pronounced ovarian. She came to Augusta. I found, upon examination, the abdomen enormously distended, the tumor reaching from the pubis to the ensiform cartilage, and occupying almost the entire abdomen without any marked preponderance upon either side. Upon pressure a hard or doughy feel was imparted to the finger. There was no fluctuation manifest, and a dull sound was elicited upon percussion throughout the abdomen, except the right hypogastric region. The tumor was movable, and upon dipping the finger deep down between the pubis and the tumor, a "cactus-like" lobe of the tumor was felt, which could be slightly raised without any apparent pain. The symptoms generally were obscure. She complained but little except from the weight, which could not have been less than twenty pounds. Examination per vaginam revealed no signs of a tumor in the pelvic cavity. But little was known about the history of the case, with the exception of the patient's avowal that it commenced on the "left side, immediately under the ribs," and was of two years standing. The "cactus" or notched-like feel of the tumor, together with the condition of the pelvic organs, and the history of the case, led me to the conclusion that it was not ovarian disease, but enlargement of the spleen (hypertrophy). I have since understood that the family have moved West, and have lost the history of the case.

I saw another well marked case of diseased spleen in the daughter of Mr. ——, of Nicholas county, which had been diagnosed as ovarian tumor.

OVARIAN TUMOR—PREGNANCY CO-EXISTING.

In the Transactions of the American Medical Association, 1851, (Atlee's tables), is a case of Dr. Atlee's, where the patient was two months pregnant at the time of operation. No miscarriage. Tumor weighed eighty-one pounds. Died of starvation.

In the Medico-Chirurgical Transactions, vol. 30, is a case of Dr. Bird, where there was no sign of pregnancy; operation performed; weight of tumor fifty pounds; abortion second day; recovered, and had a child subsequently.

ACCUMULATION OF FÆCES IN THE BOWELS.

In Prof. Gross' Pathological Anatomy, a remarkable case is related, as occurring in the practice of Dr. Lean, of Columbia, South Carolina. It occurred in a young lady aged 25. No alvine evacuation had been had for nine weeks. Upon a post mortem examination the intestines were found enormously distended; *colon, duodenum and ilium* measuring 13½ inches in circumference; the quantity of fæcal matter amounted to nearly seven gallons.

Mr. Brande relates a case where the fæcal accumulation impacted in the colon amounted to thirty-three pounds. (Same authority.)

Mr. Brown says: "I once saw a case of simple encysted ovarian dropsy, which, in its earliest stage, was considered by a very distinguished surgeon in London, to be accumulation of fæces."

I mention these cases that you may be on your guard, and not mistake, as some prominent English surgeons have done, fæcal accumulation for ovarian tumor.

In 1854, whilst attending the State Medical Society in Covington, Ky., I visited, with Dr. Chambers, a patient of his laboring under disease of the omentum. The abdomen was considerably enlarged, with some degree of ascites, but by displacing the liquid by percussing firmly with the ends of his fingers, that peculiar knotted or ridged feel which characterizes enlargement of the omentum was manifest. The history of

the case—the point at which it first made its appearance—together with that ridged or serrated feel of transverse lines, with more pain and tenderness than is usually the case with ovarian tumor, enabled me to decide in my own mind that the disease was omental and malignant.

I have seen one case of this since, a patient of Dr. Adamson, of Maysville, Ky. The disease in this case presented the above characteristics, except that it was more uneven in surface, lumpy and knotty, with all the leading indications of true malignancy. No post mortem examination was obtained.

LETTERS FROM SURGEONS AND OPERATORS.

The following letters, which I trust will prove of much interest on this subject, have fallen into my hands in answer to inquiries in search of statistics on ovariotomy:

PHILADELPHIA, Jan. 24, 1854.

My Dear Sir:

Your interesting letter came to hand last month, but has not been replied to, in consequence of my numerous and various engagements, and depression of spirits from domestic affliction. I regret that I shall not be able to render you much assistance in the investigation you are engaged in.

Some years ago I took a lively interest in the subject, from having carefully examined Dr. Bird's preparations in London, and from having read Clay's and other works sent me by their authors. Being, however, rather out of the line of my studies and practice, I have not recently turned my attention to the subject—not enough, certainly, to justify my offering any decided sentiments in relation to it, especially as I have never performed or witnessed the operation. The books, moreover, referred to, I forwarded some years since to Dr. John L. Atlee, of Lancaster.

In conversing a few days since with that distinguished gentleman, I took the liberty to show him your letter and to ask him for statistics. He referred me at once to his brother's (Dr. Washington Atlee) writings, which embodied every thing known, he remarked, upon the subject, including Dr. Lee's statistics. These I will get and send you without delay.

I will only add that I have no prejudice to contend with in the matter. My feelings, I confess, are in favor of the opera-

tion *in proper cases;* and I would not hesitate to perform it if called upon, after due study and preparation, for I have a strong conviction, derived from my two successful cases of cæsarean section, saving both mother and child, that little danger is to be apprehended from opening the abdomen, provided the peritoneum be carefully handled, and ordinary skill and prudence be exercised in the operation.

The views thus given I do not consider worth making known. I have no objection, nevertheless, if you think my authority in collateral matters of any weight, that my name be used in accordance with the remarks above stated.

The case you are about to publish is certainly a very interesting one, and I shall take great pleasure in reading it.

With great respect,

I am yours,

W. GIBSON.

—

PHILADELPHIA, March 27, 1857.

My Dear Sir:

Your letter was received last month, and would have had an earlier reply, but it came to hand while in the midst of building and moving. My papers even yet have not been arranged so as to enable me to give you a satisfactory answer, although I have a large mass of materials, which would go a great way towards establishing gastrotomy in the minds of the profession;—I mean those members of the profession who are influenced more by facts and truths in surgery than by opinions and prejudices.

My professional engagements are so pressing at present that I can not pretend to analyze the matter in my possession for your use. I will, however, send you several pamphlets—among them my table of cases—which will give you all the facts on record up to the date of publication. I may say, in reference to the operations occurring since the publication of my table, that the success of the operation is certainly not less than there represented. This ought to make it as justifiable and legitimate as any other capital operation in the catalogue of surgery. Indeed, I consider the arguments employed against it by the opposers of gastrotomy equally as applicable to many other operations long since established.

My own cases now amount to twenty-three. These may be divided into two classes.

First. Those where death was impending, and daily looked for; and

Second. Those in a more favorable condition.

In the first class were ten cases, and four lives were saved by the operation. The death of the other six was supposed not to have been hastened by it, while the comfort of all the patients was improved, and in some of the cases life was thought to have been prolonged. In none of these could death be attributed so much to the operation as to the disease. Among the recoveries, one patient was sixty-nine years old, tumor twenty-eight pounds; another was fifty-six years of age, tumor fifty pounds; another was pregnant, and the tumor was heavier than the patient;—while the fourth was bloodless from flooding after miscarriage, with a small, thread-like pulse, 130 per minute. These cases, I believe, were snatched from the grave by the operation.

In the second class are thirteen cases—nine recoveries, four deaths—very nearly the same proportion as in Clay's operations.

I congratulate you and Dr. Dunlap on the success of your operations, and would be pleased to have a report of each case, as well as all other information which you can furnish me on this and similar subjects.

Please accept a copy of my prize essay, which I also forward to your address. I have operated on six cases since its publication.

Very respectfully yours,

WASHINGTON ATLEE.

(To be continued.)

Administration of Chloroform.—A new method of administering chloroform has been invented by Dr. Faure. It resolves, says his interpreter, all difficulties in a way the most simple and satisfactory. The mouth is closed, and the patient is made to inspire air through one nostril, and chloroform through the other. Sixteen patients have been chloroformised by him in this manner, and the results have been perfect.

Notice of Memorials Concerning the Treatment of Pulmonary Phthisis, and the Physiological and Therapeutical Action of the Hypophosphites. By J. Francis Churchill. *Presented to the Imperial Academy of Sciences.*

There is no disease in the long list that human nature is subject to, the treatment of which has occupied the minds of physicians so constantly and for so long a period as that of pulmonary phthisis. Time after time the discoveries of remedies have been announced. The compounds of iron, sulphur, iodine, cod-liver oil, etc., have been arrayed before the public and had fair and persistent trials, and they all have failed to establish the virtues claimed for them, although we admit that many of them are exceedingly useful in palliating some of the distressing symptoms of this disease.

At this point we find Dr. J. Francis Churchill, a physician well known to the medical profession, taking up the study of tuberculosis in 1855, while engaged in the practice of his profession in Havana. Dr. Churchill, in his report, says:

"The first idea I had upon this subject—that which induced me to investigate it—and which, I conceive, furnishes a clue to that mysteriously morbid condition, entitled tuberculosis, dates from the month of February, 1855, while I was engaged in the practice of my profession at Havana.

"Occupied as I have been, since the commencement of my medical career, in researches upon the treatment of phthisis, my investigations led me to believe that the tubercular diathesis depended wholly upon the disturbance of the primordial functions of life; that, considering the intimate union that exists between all parts of the body, this disturbance must have, as a proximate cause, some important modification in the process of sanguification. The works of various pathologists, especially those of MM. Andral and Gavarret, the correctness of which has since been confirmed by others, indicated that the variation in the composition of the blood, in pulmonary phthisis, had no peculiar and important relation, as far as its organic elements were concerned. I was, consequently, induced to believe that it was among the inorganic elements of this fluid that we should look for the *special cause* of this diathesis.

"Medical science furnishes a numerous collection of data go-

ing to show the influence upon the economy of the greater portion of these chemical elements: as, for instance, iron, sulphur (whether in the state of a sulphuret, or as a sulphate), and the chlorides. The use of alkaline remedies was an every-day occurrence—all, or nearly all, had been tried in the treatment of tuberculosis; and although each one of them, in its turn, had been extolled, neither of these agents had presented sufficiently well marked, or uniform effects, to establish its claim as possessing a real curative influence over the disease. I therefore deducted these substances from those with which I designed to experiment, intending subsequently to take them up, should I find it necessary. I decided to commence my investigations by the use of phosphorus."

Dr. Churchill next reviews the use of the phosphates and phosphorus, both of which had been recommended as specific in tubercular diathesis, and accounts for their failure on the hypothesis—

"That the phosphorized element of the blood, or of organic matter, exists in the body in some other form than that of phosphoric acid; it was evident to me that it performed the double part of an eminently combustible substance, and at the same time entered into molecular combination with the other elements of the body, in such a way as to become an integral portion of it. But neither phosphoric acid nor phosphorus can fulfill this double indication. The former is already at its maximum of oxydation; the latter placed in contact with the liquids of the stomach, or with any of the tissues of the body, must necessarily, before being absorbed for assimilation, become transformed into phosphoric acid, or the phosphorus a hypophosphorus acid: compounds next lower on the degree of oxydation.

"These reasons explain, to my mind, the causes why the preparations of phosphorus have proved so untrustworthy; and why, on the one hand, Coindet was enabled to obtain certain satisfactory results upon employing it in large doses, while MM. Barthez and Rilliet, with much less doses, obtained only unfavorable or negative ones.

"Being satisfied that I have discovered the reason for these apparent contradictions, I believe I can establish the following double hypothesis:

"The tubercular diathesis depends upon a diminution in the system of the phosphorized element, and which, having to act the part of a combustible body, should be found at a lower degree of oxydation than that of phosphoric acid.

"After I had formed this mental induction, nothing remained for me but to verify it by facts, and to choose which, among the various combinations of phosphorus with oxygen, viz., the oxide of phosphorus, the hypophosphorus, or the phosphorus acid, I should use. My decision was based upon the following considerations:

"The red oxide of phosphorus is insoluble and very inflammable; the yellow variety, although soluble, forms combinations with bases which are very slightly so, and are by no means permanent. In addition to this, there was an objection in the difficulty of its preparation under the circumstances in which I was then placed.

"I judged that phosphorus acid would have an action much less energetic than hypophosphorus acid, it being less combustible, since it contains three equivalents of oxygen, while the latter is combined with one equivalent only. The salts formed from the former, which are soluble, are those of soda, potassa, ammonia, while *all the hypophosphites are soluble in water.* I therefore chose the hypophosphorus acid, and decided to use it combined with a base. The use of the acid itself, uncombined, seemed to me to offer no particular advantage, since at the moment it is absorbed it enters into the chemical combination with the alkaline carbonates of the blood. There was also the additional objection that it was difficult to divide it into doses; for if used, it would be necessary to determine, each time, the degree of concentration of the acid. From preference I chose to commence my experimentation with the hypophosphite of lime, on account of the important part which this base is supposed to play in the system."

Upon this theory the practice is proceeded with, and hypophosphites of various bases are employed. Dr. Churchill, in his first report, gives very detailed statements of thirty-four cases. Nine of these cases were thoroughly cured, eleven relieved, and fourteen appeared to receive no benefit. If these relative numbers are to express what future practice is to be in

the use of the hypophosphites, these compounds would certainly be said to possess great virtue.

In a subsequent report by Dr. Churchill, made to the Imperial Academy of Sciences at Paris, he says:

"I have the honor to submit for the consideration of the 'Academy' several memoranda, giving the results of the treatment of forty-one cases of phthisis, by the hypophosphites, since the publication of my work, a copy of which I now lay before it. These results *fully confirm all that I have heretofore written concerning the efficacy of these preparations in pulmonary phthisis:* and it would be easy for me to show that the ill success of other practitioners, in such cases, was owing either, 1st, To the lesions pre-existing to the treatment which were of themselves sufficient to cause death; 2d, To the existence of complications; or, 3d, To the impurity of the salts employed, and which were administered without regard to the conditions I have laid down, and consider essential.

"I have no hesitation in saying that, when these conditions are complied with, *the cure of consumption in the second and third stages* (at a period, therefore, when there can be no doubt as to the nature of the disease,) *is the rule, while death is the exception.* I am also prepared to assert that, contrary to the opinions generally received, the third stage of consumption is, all other circumstances being equal, more amenable to treatment than the second. Hereditary predisposition seems in no way to counteract the curative powers of the hypophosphites, as the patients in whom it was most strongly marked, recovered as rapidly as the others. I therefore ask the opinion of this Academy upon the cases of disease, of which I now present the notes of observation (made before any decided result was observed), in order that it may be able to determine whether the cases in question were actually attacked with pulmonary phthisis.

"It is not alone as a *curative agent*, but above all as a *prophylactic*, that the hypophosphites should be employed in combating a disease which (as M. Payer has shown) is almost entirely unknown among nations in a savage state, but which has become the permanent scourge of civilized life."

In regard to the manner of administering it, we can not

do better than extract from a letter of Dr. Churchill on the subject in the London Medical Circular:

"SIR: In reply to the inquiry of your correspondent, 'Dr. W. J.,' I beg to inform your readers that the dose of the hypophosphite which I have found the most manageable is ten grains at first, increasing it gradually up to one scruple daily. This quantity I seldom exceed, though in some cases I have used larger doses with benefit. Children, under four years of age, can seldom take more than from one-fifth to two-fifths of a grain daily. In all cases, however, with this as with any other remedy, the physician must watch its effects upon the system, which vary with the idiosyncrasy of the individual. The hypophosphite of soda having, *when pure*, nearly the same taste as common salt, may be given in any form. I usually prescribe each dose to be taken in a tumbler-full of sweetened water, or sweetened milk, or wine and water, or both, or any other drink that can be taken at breakfast or dinner. I use no other treatment of any kind unless required by the existence of complications, such as intercurrent inflammation of the lungs, diarrhœa, cardiac disease, etc."

With these facts before us, it certainly becomes the medical profession to give the hypophosphites a fair and persistent trial, whether or not we lay any stress on Dr. Churchill's theory. The compounds and pharmaceutical preparations of hypophosphorus that have been recommended and employed are—

Hypophosphite of Lime,*
" " Soda,
" " Potash,
" " Ammonia,
" " Iron,
" " Manganese,
" " Quinine.

Also sirups containing one or more of these salts. The last salt mentioned, namely, the hypophosphite of quinine, was recommended a short time since by Prof. J. Lawrence Smith.

* We take pleasure in informing our readers that we have been in the habit of using these compounds, as manufactured at the Louisville Chemical Works, and can recommend them to the profession, both for their purity and beauty. The advertisement of these works can be seen on the third page of our cover.—EDITORS.

We have since ascertained that Dr. Churchill had recommended it before, although the salt prepared for him under that name must have been a very different looking compound from the one prepared by Dr. Smith.

Pharmaceutical Department.

By T. E. JENKINS, Pharmaceutist.

New Mixture for Whooping Cough.—The following process is a modification of the formula given by M. Delahaye, which he asserts will be successful after all other remedies have failed.

Dr. Courbassier says that in localities where whooping cough appears as an epidemic, year after year, he has rarely been disappointed in its use as a remedy for that distressing complaint:

Take of Mocha or Martinique Coffee, slightly browned, in powder,	8 ozs.
Boiling water,	Q. S.

Treat the powdered coffee with the hot water by displacement, until sixteen ounces of decoction will have been obtained, in which dissolve

Ext. Belladonna, Alc.		
* " Ipecac	"	of each, 75 grains.
" Cinchona	"	36 "
Sugar		16 ozs.

Dissolve by the aid of a gentle heat and filter.

Dose for children three or four years of age, a tablespoonful repeated three times a day; under that age, half the quantity at a dose.—*Revue de Therapeutique.*

"Poisons."—A paragraph has been extensively circulated in the daily and weekly papers of the country, to the effect that *olive oil* or simply *oil*, is an antidote for all poisons. This is so far from being true that it actually increases the effects of some

* A suitable quantity of Pul. Ipecac may be substituted for the extract.—Editors.

poisons, for example, phosphorus, and has no power as an antidote to most of the others.

There is no universal antidote, and in cases of poisoning, when the proper remedy is not known, the safest plan, in the absence of a competent physician, is to produce vomiting, if it has not already come on, by some simple emetic, such as mustard and water, and then give mucilaginous drinks, milk, flour and water, white of egg, etc.

Such paragraphs as the one alluded to are calculated to do much harm, by leading persons to depend on a remedy which will, in most cases, do no good, to the exclusion of others really efficacious.—"*Druggist.*"

Editorial Department.

GLEANINGS FROM FOREIGN JOURNALS.

In the Medical Times and Gazette for June 4th is an article by Dr. Routh, on defective lactation and its remedy. Physicians are generally so much puzzled for the most appropriate means of removing this difficulty, that we quote largely from this excellent paper upon a much neglected subject:

EUPHORBIACEÆ.—Ricinus communis, oil bush. Castor-oil plant. India. Seeds are purgative, yield oil by boiling and expression. Root in decoction diuretic; leaves with lard used externally as an emollient poultice.

The lactagogue properties of castor-oil leaves were known to the Spaniards of Peru and Chili. M. Frezier, Engineer in ordinary to the French king, in his narrative of a voyage to those parts, performed during the years 1712–13–14, stopped for some days at San Vincente in the Cape de Vert. In his description of that island, he states that among other plants he saw there, the *palma christi* or *ricinus Americanus*, by the Spaniards in Peru called *Porterilla;* and they affirm that the leaf of it applied to the breasts of the nurses brings milk into them, and applied to the loins draws it away. (Dr. McWilliam's letter, p. 488, vol. ii, 1850.)

The employment of castor-oil leaves as a lactagogue in this

country dates since 1850. In a paper read before the British Association, at Edinburg, in 1850, and afterwards published in the Lancet of same year (vol. ii, 1850, p. 294), Dr. McWilliams brought the effect of this plant before the profession. The leaves of this plant in Boavista in the Cape de Verde Islands are known as the *bofareira*, which is in reality the ricinus communis of botanists, and occasionally the leaves of the Jatropha curcans, both belonging to the natural order of Euphorbiaceæ. Two kinds are known in these islands, the red and the white. They are both varieties of the same plant, but the red is avoided by the natives, the former being said to be lactagogue in its properties, the latter eminently emmenagogue. In cases of childbirth, where the appearance of the milk is delayed (a circumstance of not unfrequent occurrence in those islands) a decoction is made by boiling well a handful of the white Bofareira in six or eight pints of spring water. The breasts are bathed with this decoction for fifteen or twenty minutes. Part of the boiled leaves are then thinly spread over the breast, and allowed to remain until all moisture has been removed from them by evaporation, and probably, in some measure, by absorption. This operation of fomenting with the decoction and applying the leaves, is repeated at short intervals, until the milk flows upon suction by the child, which it usually does in the course of a few hours. On occasions where milk is required to be produced in the breasts of women who have not given birth to or suckled a child for years, the mode of treatment adopted is as follows: Two or three handfuls of the leaves of the ricinus are taken and treated as before. The decoction is poured, while yet boiling, into a large vessel, over which the woman sits, so as to receive the vapor over her thighs and generative organs, cloths being carefully tucked around her so as to prevent the escape of the steam. In this position, she remains for ten or twelve minutes, or until the decoction cooling a little, she is enabled to bathe the parts with it, which she does for fifteen or twenty minutes more. The breasts are then similarly bathed, and gently rubbed with the hands; and the leaves are afterwards applied to them in the manner already described. These several operations are repeated three times during the first day; and on the second day, the woman has her breasts bathed, the leaves applied, and the rubbing repeated three or four times. On the third day, the sitting over the steam, the rubbing, and the application of the leaves too, with the fomentation of the breasts, are again had recourse to. A child is now put to the nipple; and in the majority of instances it finds an abundant supply of milk. In the event of milk not being secreted on the third day, the same treatment is continued for another day; and if then there still be want of suc-

cess, the case is abandoned, as the person is supposed not to be susceptible to the influence of the Bofareira.

Women with well developed breasts are most easily affected by the Bofareira. When the breasts are small and shriveled the plant then is said to act more on the uterine system, bringing on the menses, if their period be distant, or causing their immoderate flow, if their advent be near.

Dr. McWilliams gives the cases of three women (occurring under the notice of Drs. Almuda, Sir George Miller, and Consul General Rendall) in whose breasts milk was induced by the employment of the Bofareira. In all these cases pregnancy had occurred some years previously.

Dr. Tyler Smith has made some experiments upon the use of this plant. He tried the effects of the leaves in five cases, in three of which it proved successful. In one it produced a copious flow of the catamenia, in another of leucorrhœa. From his experiments he believes that the castor-oil leaves, applied externally, have distinct lactagogue effects. He followed out in his experiments the description given and quoted above from Dr. McWilliams' paper, but did not apply the steam of the decoction to the generative organs; nor does he appear to have given it internally.—*London Journal of Medicine*, vol. ii, 1850, p. 951.

I believe I am the first who has used castor-oil leaves and stalks internally as a decoction in this country. I was led to do so from having frequently observed that suckling women, after taking a dose of castor-oil, usually noticed that they secreted a large quantity of milk—a result which I certainly can not entirely attribute to the removal of accumulated fecal matters; because I have not seen the same full effect from the use of other purgatives. Dr. Tyler Smith, (Ib. p. 954) alludes to this effect having been noticed by others, although, he adds, it may do this by moderating febrile excitement. It occurred to me, therefore, that in defective lactation, the exhibition of castor-oil leaves and stalks in a decoction might produce, or more directly cause, a flow of milk. I have now given the remedy in several cases, and I must say that I have not been disappointed. The flow has been remarkably increased. Three objections, in practice, against its use, however, should be mentioned. 1st. Some patients complain while taking it of a sensation in the eyes, not exactly amounting to pain, but accompanied with dimness of sight. I do not think this effect, however, is due to any peculiar effect of the castor-oil plant. I have only noticed this symptom in weak women; and I rather attribute it to the forced flow of the secretion, an effect exactly analagous to that which is observed in nurses that have suckled too long when the child takes the breast. 2d. A second is that

the dose after a time requires to be much increased, as the remedy appears to lose its effect. A temporary suspension, and the substitution of another lactagogue, remedies this inconvenience. 3d. The last objection is a more serious one, but one which I hope in time will be remedied—the difficulty of procuring the leaves or stalks in sufficient quantity.

We pass by many articles which are noticed, in consequence of their reputation as lactagogues, to quote Dr. Routh's remarks in regard to iron and cod-liver oil:

I can not close the category of medicines to be given to a suckling woman without referring to two other remedies in more common vogue—*iron and cod-liver oil.* I am quite aware that in reference to the first of these, many learned writers have shown that iron often exerts a repressive influence upon the lacteal secretion, and facts apparently in confirmation of this opinion, chiefly occurring when patients take chalybeate waters, have been given. Mr. Stanislas Martin observed at Chateanneuf in Auvergne, that cows on drinking ferruginous waters, to which they were very partial, lost their milk. The same effect was observed on a young wet-nurse, upon whom he experimented, (*Bull. de Therap.* Dec. p. 554. *Med. Times and Gaz.* Jan. 23, 1858, p. 96). I believe, however, this is an error, and that these effects are rather due to ill-timed administration, or to the preparation of iron given. Any remedy which will be likely to induce constriction generally of the system, we should expect would be *a priori* detrimental. Still I think if we look to the appearance of a woman who has long nursed, and may be said to be exhausted by the process, we shall notice some well-marked symptoms which indicate at once the remedies to be employed: general pallor, amounting often to anæmia, debility, languor, copious leucorrhœa, pain in the back, headache, increased by the erect and relieved by the recumbent position, and general emaciation. All these symptoms are clearly those of want of red globules in the blood, and precisely those which experience proves most readily subside under the exhibition of iron. Few having to treat such a case would hesitate to give it. The use of iron here, if given *pari passu* with the nursing, would have prevented, or at any rate delayed, the occurrence of exhaustive disease. So also the emaciation is often painfully remarkable after nursing. In milch cows (as I have before said elsewhere) it is this very emaciation which deteriorates so much from the value of the animal after two or three months, as to make it a losing concern for a farmer to keep a milch cow at all. Among milch cows, it is only by giving highly combustible food (oil cakes) that this result is obviated. Why not apply the same rule to

the human female? It is in the intention of fulfilling this indication that I have given cod-liver oil. Of the preparations of iron I usually give the iodide, especially where there is any strumous habit to contend against, or the sirup of the superphosphate, which I believe, from the excess of phosphoric acid, so important to both mother and child, is peculiarly applicable. Sometimes, where there is excess of acid or gastrodynia present, I give the sesquioxide or carbonate—the more astringent preparations I entirely discard. In addition I give a teaspoonful dose of cod-liver oil twice a day after breakfast and dinner. Indeed I am convinced of the usefulness of these two remedies from observation in cases where intense debility and anæmic symptoms with emaciation were wont always to make their appearance from the third to the seventh month of suckling. Having on subsequent pregnancies attended such cases, and given them during their suckling periods both iron and cod-liver oil, beginning as early as the sixth week, and sometimes even earlier after delivery, and continuing the remedies up to the period of weaning, I have been gratified on finding at the end of that period that these distressing symptoms of debility and emaciation never recurred: on the contrary, the patients were unimpaired in health, strength, and looks, and the children were far stronger and larger than those which preceded them. I fear the dread of physic and a disregard to the artificial life women lead in towns, are in great measure the causes of the common prevalence of symptoms of hyper-lactation.

As a *resumé* of the foregoing paper, I conclude that defective lactation is in many cases a curable affection; and that under proper treatment, the mother may be enabled to fulfill her maternal duties, not only without injury to herself, but with great advantage to her offspring. These results, if fully carried out by future experiment, to which I look with great interest, but I must also say, with full confidence, are, I think, of great importance.

At Milan a case of traumatic tetanus has been successfully treated with chloroform:

On the 22d she was seized with symptoms of tetanus, which soon assuming an important character, she was ordered chloroform inhalations six times per diem, without much amelioration until the 5th November. The chloroformisations were then repeated only four times, and after a while, three times and twice a day—the whole quantity of chloroform consumed amounting to eight ounces, of which some was lost during its administration. She completely recovered.—*Annali Omodei*, vol. 164, p. 323.

PROCEEDINGS OF THE COLLEGE OF PHYSICIANS AND SURGEONS.

JULY 26.

Members present—Dr. Miller, the president, in the chair, Drs. Powell, Bayless, Wible, Hewitt, Hall, Cook, Pyles, Polk, Yandell, Anderson, Thruston, Benson, Breckinridge, Hardin, Rogers, Brandeis, Thomson, Bemiss.

Dr. Miller announced to the fellows that this meeting was the occasion of the annual election of officers, and in accordance with one of our rules it is the duty of the retiring president to make before the fellows a statement of the condition of their society. The reports of the Treasurer and Librarian and Pathological Curator, which he would lay before them, would give all requisite information in regard to the executive management of the college, and it only remained for him to add a word in respect to the success of the association in a scientific and social point of view. He was glad to be able to congratulate the fellows on the unabated interest which had been manifested in our meetings throughout the year that is past, notwithstanding their frequency. He doubted not that much valuable information had been disseminated, which could have been diffused through no other channel. He would beg to suggest that, in entering on the second year of our existence, it would be well for the fellows to make a handsome contribution to the library and museum. He deemed it the more proper to offer this suggestion, because Kentuckians are wont to act rather from impulse and paroxysmally than from sober reflection and continuously, though he hoped that these important interests would not be altogether lost sight of until the return of another anniversary.

College of Physicians and Surgeons,
July 26, 1859.

Sir:

I beg leave to report the following as a list of the preparations in healthy and morbid anatomy, received and put up by the undersigned during the past year:

1. Multilocular Ovarian Tumor.—Presented by Dr. Henry Miller.
2. Cancer of the Penis.—Dr. J. B. Flint.
3. Fœtal Cyst of Extra Uterine Gestation of nine mouths, with the bones of the Fœtus.—Dr. D. D. Thompson.
4. Twins of nine months united by the funis.—Dr. N. B. Anderson.
5. Twins of four months.—Dr. R. C. Hewitt.

6. Tape worm from child of nine years.—Dr. D. D. Thompson.

7. Encephaloid of the liver, from a man of 60 years.—Dr. S. M. Bemiss.

8. Encephaloid of the pylorus, from a man of 60 years.—Dr. S. M. Bemiss.

9. Fracture of the Femur, in which death occurred from delirium tremens 92 hours after fracture.—Dr. G. W. Bayless.

10. Another fracture of the same.—Dr. G. W. Bayless.

11. Carnified Placenta.—Dr. S. Brandeis.

12. Bladder communicating by an ulcerated opening, with a large cyst lying by its side.—Dr. S. Brandeis.

13. Cystic kidney, with its ureter imperforate near the bladder.—Dr. J. B. Flint.

14. Altered urine removed from same.—Dr. Flint.

15. Epithelial cancer from abdominal walls.—Dr. H. O'Reiley.

16. Scirrhus mamma, with ossification of the mammary artery.—Dr. J. B. Flint.

17. Epithelial Cancer of the Thumb.—Dr. J. B. Flint.

18. Larynx, with False Membrane of Croup.—Dr. Griffin.

19. Rupture of the Bladder.—Dr. N. B. Anderson.

20. Concretion Removed from the knee-joint.—Dr. N. B. Anderson.

21. Uterine Hydatids.—Dr. S. M. Bemiss.

22. Rupture of the Vagina.—Dr. S. M. Bemiss.

23. Fœtus of six weeks.—Dr. N. B. Anderson.

24. Heart and Lungs, both perforated by a stab, and man lived three days.—Dr. A. B. Cook.

25. Arm Amputated.—Dr. D. D. Thompson.

All of which is respectfully submitted.

G. W. BAYLESS,
Curator of the Museum.

DR. HENRY MILLER,
President.

REPORT OF THE LIBRARIAN.

The following books and pamphlets, with the names of the various donors annexed, are in the library of the college in good order:

Boston Medical and Surgical Journal, 1845 to 1854, 12 volumes, from Dr. Miller.

British and Foreign Medico-Chirurgical Review, 1848 to 1852, 10 volumes, from Dr. Miller.

Statistical Report on Sickness and Mortality of the U. S. Army, 1 volume, from Dr. Miller.

Clinical Lectures by Bennett, from Dr. Bemiss.

New Orleans Medical News and Hospital Gazette, 1858, from Dr. Bemiss.

Elements of Surgery by Velpeau, 3 volumes, from Dr. Flint.

Western Journal of Medicine, 1840 to 1858, 18 volumes, from Dr. Bayless.

British and Foreign Medico-Chirurgical Review, 1829 to 1841, 24 volumes, from Dr. W. Goldsmith.

Quackery Unmasked, by Dr. King, 1 volume, from the Publisher.

Favorite Prescriptions of American Physicians, by Dr. H. Green, 1 volume, from the Author.

Green, on Bronchitis, 1 volume, from the Author.

American Journal of Medicine and Surgery, from Dr. Rogers.

Semi-Monthly Medical News, from Editors.

S. BRANDEIS, *Librarian.*

The following gentlemen were chosen to fill the offices prefixed to their respective names for the ensuing year:

President—R. C. HEWITT.
Vice President—S. M. BEMISS.
Corresponding Secretary—D. W. YANDELL.
Recording Secretary—JOHN THRUSTON.
Treasurer—B. M. WIBLE.
Librarian—N. B. ANDERSON.
Pathological Curator—A. B. COOK.

Board of Censors.—HENRY MILLER, LLEWELLYN POWELL, JOHN HARDIN, LEWIS ROGERS.

Some Formulæ employed by the Medical Professsion in Lyons. (Bulletin General de Therapeutique, January 30th, 1859.)

1. *Antidyspeptic Powder.*—Take of subnitrate of bismuth, twenty grammes; of hydrochlorate of morphia, five centigrammes. Mix, and divide into twenty powders; one to be taken after each two meals, in two tablespoonfuls of water.

2. *Collyrium in Chronic Ophthalmia.*—Take of water, one hundred and twenty-five grammes; of tincture of aloes, ten drops; of ammonia, four drops; of sulphate of copper, five centigrammes. The eyes to be bathed twice a day for two minutes. This wash is principally indicated in chronic scrofulous ophthalmia accompanied by obstinate ulceration of the cornea. It should only be employed after the cessation of acute symptoms of inflammation.

3. *Pomade for Ulcerated Chilblains.*—Melt sixteen grammes of yellow wax in thirty grammes of linseed oil; add eight

grammes of tincture of benzoin and fourteen grammes of glycerine, and flavor with essence of lavender.

4. *Pomade for Acne.*—Take of lard, fifty grammes; of sublimed sulphur, four grammes; of tannin, four grammes; of cherry-laurel water, five grammes. Mix accurately. Dr. Rodet employs this pomade with success in all forms of acne, and has also found it serviceable in sycosis, when the inflammation has been subdued and the crusts have fallen.

5. *Laudanumized Wine of Squills.*—Take of white wine a pint; of powdered squill, eight grammes; of laudanum, twenty-nine grammes. Dr. Teissier has obtained advantageous results from the employment of this wine in dropsies, especially those which follow pulmonary emphysema.

6. *Powder for Nocturnal Incontinence of Urine in Children.*—Take of carbonate of iron, fifteen centigrammes; of extract of belladonna, three centigrammes; of powdered nux vomica, three centigrammes. This dose to be taken every day. The employment of this remedy is said by Dr. Faure to be generally followed by a complete cure at the end of eight or ten days.—*British and Foreign Med. Chirurgical Review.*

We again remind members of the State Medical Society that they are entitled to all numbers of the Medical News which contain any portion of the reports read before that Society. If any member has failed to receive his copy, or knows of failures on the part of others to receive theirs, he will do us a favor by informing us as early as practicable, that we may supply missing papers before our back numbers are exhausted.

Our readers are referred to the advertisement of Messrs. Degenhardt & Lowe, manufacturers of surgical instruments, etc. For fineness of temper and finish their instruments are not surpassed by any which are manufactured in America, and we have always found their terms to be reasonable.

Doctor Rouillard, formerly physician of Jerome Bonaparte, died at Nantes, at eighty-four years of age, while active and zealous in the exercise of his art.

Semi-Monthly Medical News.

VOL. I. LOUISVILLE, KY., SEPTEMBER 1, 1859. NO. 17.

REPORT, READ BEFORE THE COLLEGE OF PHYSICIANS AND SURGEONS OF LOUISVILLE, BY LEWIS ROGERS, M.D.

The following report is limited to a consideration of "the relations of fistula in ano to pulmonary tuberculosis," and consists of the cases reported to me by the fellows of the college, of the various authorities who have written upon the subject, and of a few reflections suggested by these and by my own experience.

The cases are not as numerous as I had expected they would be;—very few members of the college have responded to the request made when this committee was appointed. I am indebted to the research of Dr. D. W. Yandell for many of the French and English authorities quoted; they are very interesting, and embody the matured opinions of the most enlightened members of the profession. Taken together, they constitute a larger amount of testimony in regard to the subject under consideration than is to be found elsewhere:

DEAR DOCTOR:

I have a distinct recollection of eighteen or nineteen cases of anal fistula, which have been treated by me since the year 1830. Of this number, three had well developed phthisis; the fourth is now in an anemic state, and very much emaciated—no doubt having tubercles in his lungs. The three first I declined operating on; the fourth was treated with a ligature.

The remaining number were apparently healthy individuals. Three of these patients were females, one of whom was also cured by ligature, after having been previously operated on with the knife by another surgeon.

Yours respectfully,

WM. H. DONNE.

DR. L. ROGERS.

DR. D. W. YANDELL:

Dear Sir—I have treated fourteen cases of fistula in ano. Ten were treated by operation with the knife, three by ligature, and one by chloride of zinc paste.

Of those treated with the knife, nine were cured. In one the wound did not heal,

but became covered with what seemed to be mucous membrane. This patient, a young negro man, died two years subsequently with Cachexia Africana. There were no indications of this disease at the time of operation.

Of the others operated on with the knife, some had two and one had three fistulæ, all of which were laid open. In several, the opening into the intestine, if any existed, could not be found. An opening was made in these cases just above the sphincter.

Of those operated on by ligature, one had had several pulmonary hemorrhages; he has been well of his fistula for two years, has had no return of hemorrhage, and is actively engaged at his occupation. Of those treated by ligature, none were confined by the treatment, and the ligatures were never drawn tightly. The last case treated was an incomplete fistula, about one inch deep, and of seven years standing. It was treated by the introduction of chloride of zinc paste to the bottom of the opening every second day for seven or eight weeks, by which time it was completely healed, and has remained so to this day, now a year.

My patients were thirteen males and one female, ranging from seventeen to sixty years.

Yours respectfully,

JOHN HARDIN.

12*th May*, '59.

DR. L. ROGERS' CASES.

James P., native of Kentucky, æt. 26, intemperate habits, father subject of fistula in ano, mother of tubercular phthisis, came under my notice in 1837, with fistula in ano of nine months duration; had been unsuccessfully cut some time before I saw him; was treated again with the knife, and after several operations and a tedious process of dressing, was perfectly relieved. In consideration of his strong hereditary tendency to pulmonary phthisis, and of the possible prophylactic influence of the fistula, a caustic issue was opened on the thigh, and suppuration maintained for a number of months. Under this course, his health continued good up to 1845, when symptoms of pulmonary phthisis manifested themselves, and rapidly progressed to a fatal termination. Patient had no return of fistula.

Shortly after the cure of the anal affection in the case of J. P., a younger brother became the subject of fistula, which was treated with the bistoury and speedily relieved; a caustic issue was made upon the thigh in this case also, but in a few months phthisis pulmonalis was developed and proved speedily fatal.

Several other members of this family had phthtsis and fistula. The oldest son died with phthisis without fistula; the second son had fistula which proved rebellious to surgical treatment for a long time, but was finally cured by the knife. Upon the cure of the fistula, pulmonary symptoms of a threatening kind supervened, but gradually subsided under a large caustic issue upon the chest, and an active life in the open air. He is now living in robust health, without any recurrence of the anal affection. The next brother died with pulmonary phthisis, an anal fistula occurring late in the case, without any modification of its progress. A female child of the same family died about the age of twenty with phthisis uncomplicated with fistula. The father, as before stated, had obstinate fistula, which he attributed to the lodgment of a foreign body in the rectum; never had pulmonary disease, and died of abdominal dropsy, at the age of sixty-nine. The mother died of phthisis without fistula, at middle life.

G. C., æt. 25, native of New York, circus rider, habits good, thin and pale in appearance, but general health good; had simple complete fistula in ano in 1838; treated with ligature, and cured in two months. No impairment of health or pulmonary symptoms for several years, when case was lost sight of.

Mrs. M. C., æt, 39, of parents free from strumous taint; subject of membranous dysmenorrhœa from date of marriage, twelve years before; complete fistula; operation by ligature, which came away in six weeks, with successful result. Has enjoyed since operation in 1852, her usual health; no pulmonary symptoms.

Mr. D., of Buleyville, Ky., came under my notice in August, 1853; had tubercular phthisis; a cavity at the apex of right lung, and physical signs of tubercle in left; great emaciation; condition such as to indicate a fatal termination very soon. Under cod-liver oil, brandy, and other restorative means, he rallied rapidly, and presented himself to me the following March, very much improved, both in general appearance and in regard to pulmonary trouble; physical signs, as in August, yet denoting a cavity in right lung, and tubercles unsoftened in left.

In 1856 he again visted me in a very improved condition; general appearance that of tolerably good health; cough and expectoration very slight; physical signs indicating receding disease of lungs. He informed me that in the fall of '54, fistula in ano developed itself, to which he had given no other attention than that necessary to cleanliness and comfort. In the winter of 1858–9 he was still living, and reported by his brother to be in very much the same condition as when I last saw him in 1856; still has fistula and some pulmonary symptoms, though able to attend to business.

Mrs. B., æt. 25, of healthy parents, without children, in apparently good health, became the subject of abscess near the anus in 1856, which opened and discharged, and eventuated in an incomplete fistula; was operated on with ligature, which cut through in about four months; cure perfect; has since had very excellent health.

A. Victor, a coal-boatman, came to me in the winter of 1857, with complete fistula; otherwise in good health; the ligature was used, and a cure effected in a few weeks; twelve months after was free from either general or local disease.

Green, a yellow man, very obese, æt. 45, came under my care in the winter of 1857, to be treated for a complete fistula of some months standing; had been the subject of cough and asthma from boyhood. I used the ligature, which cut through very rapidly without effecting a cure. He declined further treatment by me and passed from my charge to that of a notorious doctor of this city, who treated him for twelve months or more without a cure; neither ligature nor knife was used. Recently has been treated by me for intermittent fever; informs me that his asthma and cough have been much less severe since fistula was developed; is content to put up with the inconvenience of this in consideration of the relief afforded to pulmonary symptoms.

S. S., a youth of 18, of healthy parents, and himself healthy up to the winter of 1858, when he had troublesome cough which continued for several months, became a patient of mine in Jan. 1858; had cough then of moderate severity and without expectoration, with physical signs indicating bronchitis. In February complained of pain about anus and difficulty of defecation. Upon examination found an induration of an inflammatory kind near anus, which soon softened and was opened on the 22d; abscess continued open and became fistulous; could not find any internal opening; general health seemed much impaired by cough and fistula, though a marked improvement took place in the former upon the occurrence of the latter. In May a ligature was used, which, owing to the excessive sensibility of the parts, was very slowly tightened, and did not come away until the following November, when, by the aid of the knife, it was removed; a suppurating channel was left, which continues to annoy him somewhat to the present time. While wearing the ligature, the cough was much mitigated, and the general health very much improved by the use of cod-liver oil. He is now quite well.

Wm. K., æt. 30, an athletic carpenter, with no known morbid tendencies, after an attack of tertian intermittent in the summer of 1856, had a large abscess near the

anus which eventuated in a fistula; was treated with the ligature and cured after a tedious siege of more than twelve months. Is now in good health, but has lost the fresh and vigorous appearance which he had before the occurrence of fistula.

Sam K., a younger brother of William, had acute pneumonia three years ago, which left him with an obstinate cough; about eighteen months after the attack of pneumonia, fistula occurred and continued until the spring of the present year, when a ligature was used and rapidly carried through, curing the fistula in six weeks. Patient now has cough, muco-purulent expectoration, hectic fever, and physical signs of tubercular phthisis.

Dr. B. had cough, with physical signs of tubercles in lungs for two years anterior to the spring of 1859, when an abscess formed near anus, since which there have been a marked abatement of the pulmonary symptoms and an improvement in general health. The abscess was opened in April and patient advised to defer all curative treatment of fistula for the present: have not heard of case since abscess was opened.

DR. D. W. YANDELL'S CASES.

1. Complete fistula of two years standing, patient an Irishman, æt. 32, intemperate, laborer, no phthisical tendencies, and without either rational or physical evidences of pulmonary disease; no hemorrhoids; internal opening just above verge of anus; operation by knife; cure complete; no return.

2. Complete fistula, internal opening near margin of anus, patient a German, aged 40 years, excessively intemperate, free from suspicion of tuberculosis, large hemorrhoidal tumors; operation by knife; cure complete; saw patient six months afterwards, no return at that time.

3. Complete fistula, internal opening ditto with No. 2, negro man, aged 24, temperate, neither hereditary nor acquired tubercle, no hemorrhoids, operation by knife in 1856; cure complete; no return.

4. Complete fistula, internal opening ditto with No. 3, Irish laborer, aged 40, moderately temperate, no tubercle, without hereditary predisposition to it, no hemorrhoids; fistula formed ten years before he applied to me; operation by knife; well in three weeks; no return four years after.

5. Complete fistula, internal opening same as No. 2, a Scotchman, aged 40, excessive drinker; cough, and other rational evidences of phthisis, but neither Dr. Bowling, of Nashville, or myself were able to discover any physical signs of tubercle; no hemorrhoids; operation by knife; cure complete; cough and other pulmonary troubles disappeared.

6. Complete fistula, internal opening not clearly made out, but believed to be in its usual situation, a German tailor, aged 30, temperate, in good health, fistula of four years standing, small hemorrhoidal tumors, no tubercle, had been operated on by knife, but thinks the section was not complete; the parts healed, but the fistula remained; operation by ligature; cured in six weeks; three years after date of operation no return.

7. Complete fistula, internal opening same as No. 2, a physician, aged 34, health poor, exhausted by the large discharge which had continued for two years, mother and several other members of his family died with phthisis; no hemorrhoidal tumors, though there was general dilatation of the hemorrhoidal vessels; operation by ligature; cure complete in two months; general health much improved, gained flesh and strength and continued hearty for three years, when he died with typhoid fever.

8. Complete fistula, internal opening the same, a lady, married, a mother, aged 24, of phthisical proclivities, but without either rational or physical evidences of

tuberculosis; no hemorrhoids; fistula formed two years before operation; operated on by ligature; at the end of six weeks fistula had healed throughout the large part of its extent;—a new fistula appeared; another ligature applied; five or six months after introduction of second, had repeated pulmonary hemorrhages; and after exposure to cold suffered with a sharp attack of pleuro-pneumonia. Recovered with a cough, lost flesh, had hectic, night sweats, and died with all the symptoms of pulmonary consumption, within about eight months after first hæmoptysis. The fistula divided by the first ligature never entirely closed, and that divided by the second ligature remained patent to the last.

9. Complete fistula, internal opening same, a physician, aged 35, a full liver, general health good; lost a brother with phthisis; no hemorrhoids; fistula of 18 months duration; operation by ligature; cure complete in six months; no return four months after.

10. Complete fistula, internal opening as No. 2, commercial man, age 50, a high liver, unexceptionable general health; no suspicion of tubercle; large hemorrhoidal tumors; believed fistula came on from an acute attack of hemorrhoids; six weeks standing; operation by ligature; cure in five weeks; no return at the end of four months; hemorrhoids much diminished in size.

11. Complete fistula, internal opening same as No. 2, Irish laborer, 20 years of age, temperate, fistula of several years duration, had affected the general health, flesh wasted, appetite poor, discharge from the fistula excessive; no physical signs of tubercle; does not know in regard to the health of his family; no hemorrhoids; operation by knife; section did not close. Two years after the operation, parts have not cicatrized; general health meantime has declined, and I understand that the patient at this time unquestionably has pulmonary tubercle.

"Among those fistulæ which occasion a large waste of a fluid important to the support of life, may be classed certain salivary and stercoral fistules. Such should always be operated on. According to some authorities, the cure of anal fistules of long duration in old persons, should never be attempted, if there be even the slightest chest or head trouble, or the least digestive, or other functional disorder since, say they, in the event of cure a natural issue is suppressed, all the derangements alluded to become aggravated and death results from lesion in either the head or thorax, or both. Visceral lesions independent of the age of the individual, are considered by some as affording still stronger reasons for surgical non-interference. The schools teach, for instance, that the operation is not allowable upon consumptives or those threatened with pulmonary tubercle, because the patients die when operated on. I can not think that this subject has been studied with sufficient care. The precise meaning of the term, "threatened with consumption," should first be determined; for it has been repeatedly found that those very persons who are said to be threatened with consumption, or who were ever pronounced actually phthisical, are exhausted merely by the abundant suppuration going on in the region of the anus. The cough, the shortness of breath, and the functional disturbance of the heart observed in such cases, have, in some instances at least, shown themselves subsequent to the date of the fistule, and are often wholly removed by the cure of the anal drain. In 1833 I operated successfully on a patient who had spit blood and had shortness of breath, though with a sonorous chest. He had besides a nervo-epileptiform affliction. The fistule was cured. The patient had no return of hæmoptysis, and the nervous attacks were greatly benefitted. I should not, however, omit to say that some hemorrhoidal enlargements that previous to the operation had never bled, did bleed soon after in small quantity, and subsequently discharged periodically. Nature hereby replacing an exhausting and painful flux by one which is infinitely less so.

"It has been said that consumptives operated on for fistula all die. What is the

result with those not operated on? I am aware that it may be answered that the surgeon is not chargeable with the death of those not operated on, and surgery therefore has fewer failures to record. There can be no one who attaches more weight to this argument than I do, when it refers to the capital operations. I have, for instance, always believed that to make a long, painful, and dangerous resection of a carious clavicle in a patient whose lungs are stuffed with tubercle, is to do what nothing can justify; and as a rule I am opposed to all operative interference in individuals doomed to inevitable death. But to make a simple incision at the anus, an incision which can be completed in a second without even the knowledge of the patient, can not be considered an operation. I am even inclined to believe that this incision is sometimes called for in abscesses which discharge showly and thereby confine secretions, the free evacuation of which would diminish those resorptions which occasionally, at least, must accelerate the fatal termination of phthisis.

"In fistula one of two conditions is present, either the fistula is intimately connected with some visceral lesion, or it is not. If the former, no incision will close it; if the latter, there can then be no objection to the operation. I do not conceive that in operating for fistula, you close it, but on the contrary I hold that you merely lay open a cavity, and thereby place it in the most favorable condition for healing, which, if the constitution be good, it will do; and if, on the other hand, the reverse be the case, it certainly will not do."—*Vidal.*

"The belief which has long commonly prevailed, that there is a proneness to the formation of fistula among persons laboring under pulmonary phthisis, has, like several other opinions resting on general impression, been shown not to stand the test of the strict observation of facts.

"Where the symptoms, then, of tubercular disease of the lungs are present, the operation for fistula is not allowable. It seems probable that the constitutional state in which ulceration of the mucous membrane of the rectum is prone to occur spontaneously, would not be favorable to the reparation of a sinus after an operation. But be this as it may, the wound does not heal, the sore is but enlarged, and the surface secreting pus, augmented. In short, the operation fails, and in failing, adds to the evil. I am not, however, disposed to look upon a former threatening of phthisis as always a bar to the operation, if the health at the time be robust."—*Quain.*

"It is a pretty common opinion that phthisis frequently gives rise to anal fistula, establishing thus, as it were, a sort of an issue, which, by diverting from the affected organ, retards as is supposed the progress of the original malady. Respectable as the authority certainly is by which this notion is sanctioned, it is entirely at variance with the experience of every intelligent observer of the present day. The circumstance I am convinced is in great measure, if not wholly, accidental; at any rate, I can truly say that it has rarely occurred in my practice, nor have I witnessed it more than three or four times in my dissections of phthisical subjects. Nor do I stand alone in this opinion. The more ample testimony of Laennec, Andral, Louis, and Horner, is equally strong and conclusive. The first of these authors, who treated an immense number of consumptive patients, positively declares that anal fistula was not only very rare in his practice, but that when present, it seldom exerted any appreciable influence on the progress of the pectoral complaint."—*Gross Path. Anat.*

The above authority says that the late Dr. W. A. McDowell informed him that he had not found the complication in more than three or four cases.

"Fistula in ano has been observed very often in consumptive subjects, and even after phthisis has commenced, and in this case is said to protract or even suspend its progress."—*Dickson's Elements Medicine.*

"As the arresting of habitual discharges and the removal of long established exter-

nal diseases sometimes prove exciting causes of phthisis, it is proper in this place to put the practitioner upon his guard against a too hasty attempt to cure such affections. Thus it is far better, as a general rule, that old ulcers on the legs, fistula in ano, hemorrhoids, and external scrofulous tumors should be encouraged as safe outlets of the morbid tendencies, than that any effort should be made to get rid of them."—*Wood's Pract. Medicine.*

"It does not clearly appear why fistula in ano should occur so often as it does in persons prone to pulmonary tuberculosis, and still less why its existence should be preservative, at least in not a few cases against the invasion of this dread malady."—*Jones and Sieveking.*

"The opinion is generally received and has been sanctioned by Bordeau, that phthisis frequently gives rise to fistula in ano, and that the latter exercises a salutary influence over it, and retards its fatal term. On this point, M. Laennec, out of his immense experience and exact observations, states that he has seldom met with this coincidence, and that it has appeared most frequently without influence on its progress. I may state that my observations coincide with his."—*Horner's Path. Anat.*

"It has long been supposed that this affection has some connection with the phthisical diathesis, and the remark has been so often made by observing practitioners as to deserve attention. I have met with four cases, in three of which fistula supervened so directly on the pulmonary symptoms, and so kept pace with them that I could scarcely consider its presence as an accidental coincidence."—*Morton.*

"This affection has been frequently found in consumptive patients, and has been supposed to be connected with the disease. Although we have often met with it, we have been unable to trace any connection between it and phthisis, further than its probable dependence on abdominal venous plethora which so often precedes pulmonary consumption. Andral states that the result of his observations does not confirm the opinion of a connection between the two diseases".—*Jas. Clark.*

"Concerning the peculiar relation recognized by most surgeons between fistula ani (which is generally of hemorrhoidal origin) and pulmonary phthisis, I have no precise or satisfactory explanation to offer. Bushe says that the constantly recurring impulse of the cough irritates and dilates the veins to which the cellular texture, owing to the absorption of the fat, can no longer afford adequate support, and that the dilatation is augmented by consecutive stagnation in the portal system, arising from the hurried character of the pulmonary circulation.

"It is more probable, however, that in persons who die of phthisis, shortly after the healing of fistula ani, tubercles pre-exist in the lungs—remain latent so long as the derivative suppuration lasts, but soften down so soon as it is checked."—*Hasse.*

"Are there any circumstances, general or local, that should deter us from venturing to relieve the patient by this operation? There are both. I mentioned to you that experience proved, in particular instances of fistula in ano, a connection or sympathy between the local disease and grave pulmonary affections.

"Now, if you meet a case of this kind, never attempt to operate, if you find, on inquiry, that the patient had had a chest affection for some time—that there came on the local complaint about the rectum, and that on its appearance the other complaints were relieved. Any operation that you performed for that man's fistula would hasten his death. If, on examining the fistula with a probe, you find that it extends very high up—that is, beyond the length of your finger introduced into the rectum, you should not operate, because you would probably wound the trunk of one of the hemorrhoidal arteries before it divides into branches, or some considerable venous trunks, and a hemorrhage be the result, attended with some danger to the patient, and very great difficulty and trouble to the surgeon to

arrest it. If the course of the fistulous canal be not parallel to the rectum—that is, suppose the upper part of the canal be a considerable distance from the rectum and its lowest part near it or *vice versa*, you should not operate. If the fistulous canal be parallel to the rectum, and on passing the probe up into it you find every part of the canal even an inch distant from the coats of the gut, as felt by your finger in the latter, that distance is no objection to the operation."—*Colles.*

"I have witnessed so many cases of fistula in patients affected with pulmonary consumption, that I am disposed to consider it frequently symptomatic of that disease. In all the instances I have met with, the patient died soon after the healing of the fistula."—*Dorsey.*

"If the individual is affected with hæmoptysis and advanced phthisis pulmonalis, while laboring under fistula in ano, this ought not to be operated on, since it seems to act as a counter-irritant and prolongs life."—*Lizars.*

"Internal hemorrhoids, which suppurate and destroy the walls of the rectum, are among the exciting causes of fistula. Nevertheless, the disease depends more frequently upon internal causes, and experience goes to show that obstructions in the pelvic viscera give rise to it in the greater number of cases. The fact should not be lost sight of, that fistula frequently depends upon the general state of the economy, and that, although the operation may be the only means of cure, it would be imprudent and even dangerous to undertake it.

"Heister relates the case of a patient who was seized with gout whenever a fistula, of which he was the subject, ceased to discharge, and who was at once relieved of all arthritic trouble when the discharge from the fistula was re-established. Richter mentions that he saw an individual who became amaurotic soon after a fistula, which he had, was operated on.

"Fistulæ very often accompany phthisis pulmonalis, of which, indeed, they may be regarded as a salutary crisis, and the progress of which they hinder, or at least retard. Prudence teaches us not only under such circumstances, but also when the individual is of feeble constitution or cachectic, that fistules should not be interfered with. But if the patient insists upon being rid of the disease, it is necessary, before attempting it, to establish an issue for the purpose of affording another outlet to the discharge. This precaution is not the less indispensable when the fistula has, by its long duration, become a habitual excretory. Indeed, under such circumstances, if the affection is excessively inveterate, if the fistulous canal is lined throughout by callosities, or if the opening into the rectum is situated beyond reach, no attempts to cure are allowable, and the surgeon must content himself with keeping the external orifice patent, and enforcing strict cleanliness on the part of the patient.

"Those cases of fistula in which surgery is warranted in attempting to relieve, are limited to those instances where the fistula is recent and with slight complications, where, in other words, it appears to be purely a local affection, and where it is a source of continual annoyance to the patient. Fistula should not be operated on when it is inflamed or painful, or when it is accompanied by very voluminous hemorrhoids."—*Jourdran Dict. Dis. Sciences Medicals.*

"The cure of fistula in those who have been much addicted to drinking spirituous liquors, or who have a tendency to tubercular phthisis, is frequently of dangerous consequence, and is succeeded by ulcers of the lungs and death."—*Darwin Zoonomia.*

"We know not how the opinion so generally diffused, that this fistule is very frequent in individuals afflicted with phthisis, could have been accredited. Nothing, according to my observation, could be more incorrect; for, out of above eight hundred persons, manifestly in different stages of phthisis, I met fistula of the anus but once."—*Andral.*

"Whatever tends to the formation of matter about the anus may produce it.

Thus the piles, hardened fæces, etc., etc., frequently succeed fever and other diseases of the constitution. In no variety of sore do issues act with more advantage than in fistula, especially when the discharge has been of long duration. Different instances, indeed, have occurred to me in which, when issues were not inserted, the patient was obviously injured by curing the disease. Other diseases of a more alarming nature were induced by it, while in some I have not been able to obtain a permanent cure of the sinus till an issue was inserted. I am now, therefore, so much convinced of the utility of issues that whenever the disease has been of long standing and the discharge copious, I never advise the operation until an issue has been inserted."—*Benj. Bell.*

"Some surgeons maintain that fistules in phthisical patients should not be operated on—that they act as excretories. Very difficult to have personal experience on this subject from hospital practice, for the patients are lost from sight. He never hesitates unless the affection of the lung is very far advanced, and, in such cases, the unwillingness to operate proceeds not from fear that the operation will do harm to the chest, but because the incisions do not heal, so that it is not worth while to operate."—*Nelaton.*

"Fistula in ano is rarely a serious malady, involving the life of the individual. Nevertheless, when the sinuses are numeorus, the tissues extremely indurated, and when the rectum participates in these changes, it may result in real danger. As to the operation for its relief, simplified by modern surgeons, it carries with it no dangers from intense inflammation, hemorrhages, or consecutive contraction of the anus, produced by the means formerly employed. Nearly all fistulæ are susceptible of being operated on with success, except in subjects who are emaciated, badly nourished from defective assimilation, affected with a chronic phlegmasia, who can not endure the operation (although neither protracted nor severe),or the small amount of suppuration which follows it, or finally with those in whom there is danger of increasing the intensity of some internal affection by the cure of the fistula. It is necessary at such times to treat the case with care and attention, keep the bowels open, prescribe a suitable regimen, and suitable remedies for the irritations that occur from time to time in the seat of the disease. This hygienic treatment will not, it is true, cure the disease, but will assist to diminish its inconveniences, hinder its progress, and prevent its influence upon the rest of the organization."—*Dictionaire de Med. et de Chirurg. Pract.*

"Mr. Hird prefers ligature in all cases where hemorrhoidal veins are unusually large, or where patient has dread of knife—less painful than knife, and frequently cures in shorter time. His experience does not confirm the opinion that all fistules have an internal opening into the rectum, nor do his observations verify the opinion that fistules are most frequently found in phthisical patients, but, on the contrary, are in harmony with the views of Louis and Andral, both of whom demonstrate by inquiries that these affections, occurring simultaneously in the individual, are merely the result of accident, and that they do not stand in relation of cause and effect."—*Med. Times and Gazette.*

"I have found, while clinical clerk for Sir H. Marsh, at Stevens Hospital, that the percentage of the phthisical patients who were laboring under fistula was remarkable. Writers on this subject have attempted to account for the frequency of fistula in patients laboring under pulmonary consumption by their liability to ulceration of the intestines, especially the large one. The ulcer not confining itself to the mucous membrane, makes its way through the other coats of the intestine, and gives rise to inflammation and suppuration in the cellular membrane, external to the gut; and although this is a plausible theory, which may, in a number of cases, account for the presence of fistula, yet it does not hold good in all cases, for I have seen, and I presume most medical men have also met with cases of fistula in

persons affected with phthisis, who had no symptom of intestinal disease whatever. If organic disease of the pulmonary or digestive organs exist, and the fistule is operated on, discredit would assuredly be entailed not only on the operation, but likewise and deservedly on the operator, for either of two things would, to a certainty, happen, viz: that the wound inflicted by the knife would not heal, but would take on unhealthy action, or, if it did heal, that the patient's life would thereby be considerably shortened, the natural drain being suddenly arrested, the organic disease would redouble its strides."—*J. S. Hughes, Dublin Med. Press.*

"The most frequent cause of fistula is the ulceration of hemorrhoids—a fact already noted by Sabatier—the correctness of which has been demonstrated by M. Ribes. In one hundred fistules he found ninety-nine produced by ulcerated hemorrhoids. Incision is preferable to all other methods of operating. If anal fistula is operated on in a consumptive, a discharge which nature has established as a derivative is suppressed, and the progress of the affection of the lung is accelerated. Pulmonary tubercles, cancer of the rectum, serious lesion of the liver, and of the other abdominal viscera, are the contra-indications to the operation."—*Jobert.*

"All fistules are not susceptible of cure; there are those that are necessarily incurable, either because the cause upon which they depend can not be removed, or because they are complicated with too numerous or too serious lesions. There are others which, while it would be possible, it would be dangerous to cure. Such are fistules in individuals threatened with or actually the subjects of pulmonary tubercles. In either of these conditions, methodical dressings, dilatation, and injections comprise the only treatment."—*Marzolin Dict. de Med.* 30 *vols.*

"If the operation is inadmissable in consumptives, it is less because the cure of the fistula aggravates the tuberculous trouble, than because of the impossibility of obtaining cicatrization of the wound. The reverse, I know, is sometimes observed, but it is the exception to the rule."—*Velpeau Dict. op. Cit.*

"The presence of fistula by no means implies the present or previous existence of hemorrhoids. Ribes asserts that a fistule is formed by the bursting of an internal pile into the rectum, and a consequent passage of a portion of the contents of the bowel into the orifice. He asserts that the orifice is always within five or six lines above the junction of the mucous membrane with the skin. This is not always the case."—*Larry Men. etc., Mil. Surgery.*

"Among the causes tending to retard the progress of pulmonary consumption, I am disposed to mention fistula in ano. A few years since I had, at one time, under care nine consumptives afflicted with fistula. On adding the periods together and dividing by the number of patients, I obtained an average of two years and nine months, although the disease had not, in any instance, advanced beyond the first stage. The duration of phthisis in a majority of cases does not exceed eighteen months. Fistula may, therefore, in the way of counter-irritation or derivation, retard the progress of the malady. Fistula in ano in the phthisical is inapt to heal after operation; and were it otherwise the operation would be a measure of questionable propriety, if the disease tends directly orindirectly to a bate consumption."—*Theo. Thompson, Pul. Consumption.*

"Fistula in ano was seldom met with in the post mortems of individuals dead with phthisis."—*Louis and Andral.*

"I enjoin caution in attempting the radical cure of fistula in cases of incipient phthisis and recent insanity, or where its appearance has evidently alleviated any serious visceral disease."—*Jno. Bell.*

"Fistula is too frequently connected with morbid conditions of the lungs and intestines, equally fatal and incurable—causes, chiefly, inflammation of hemorrhoids; remaining long in sitting posture, constitutional disturbance and local irritation from foreign bodies arrested in the rectum. Occurs most frequently during the

vigor of life, between twenty and fifty years, is very often met with in phthisical persons, whether owing to the irritation that is caused by the morbid state of the lungs, or dependant on ulceration of the intestines, which generally exists in such cases, it is difficult to decide. It is now admitted that, except through means of the knife, a cure is impracticable. Fistula connected with phthisis is, of course, incurable."—*Syme.*

PROF. WHITE'S CASES.

1. Mr. D., of light complexion, predisposed to tubercle, was operated on fifteen years since, and is still living.

2. A gentleman about the same time and under the same circumstances still living.

3. Mr. B., died 7 or 8 years after operation of cirrhosis.

4. A gentleman operated on twenty years since, died of pulmonary tubercle ten years after.

5. A thin man, unhealthy, was operated on several years since, and is now quite fleshy.

6. A lady, who has always labored under consumptive symptoms, operated on 10 years ago, has been more free from phthisical symptoms than before operation.

7. A gentleman now living, quite an old man, family predisposed to consumption, was operated on ten years ago, is still living.

Prof. White thinks it proper to lessen the drain upon the system where tubercular symptoms are present, by moving the anal affection.

Prof. Flint thinks it doubtless true that many cases of anal fistula proceed from tubercular deposit in that region. But it is equally true that many cases are purely local, and do not involve any general dyscrasis. In order to solve the question a distinction must be made between these two classes of cases. When the fistula is tubercular, we may take it for granted that tubercles exist also in the lungs, in accordance with the law established by Louis. We must have facts, then, which would show what effect the operation had upon tubercular cases, excluding those purely local, about which there could be no dispute. A series of such cases would establish a law. Recent observation has furnished three cases in which phthisis had progressed very slowly. Should this number be increased, and should it be found that anal fistula was a check upon the progress of the lung disease, it would follow that it should not be interfered with. It was possible that the anal fistula was a drain upon the blood dyscrasy, leading tubercle to deposit in that region, instead of attacking the lungs.

1 of his cases was confirmed phthisis, complicated with anal fistula. It was remarkably prolonged in its duration.

2. Came to the hospital to be cured of anal fistula. He also had tubercle, and was advised to forego the operation, as it might hasten the progress of disease in the lung, which was then quiet.

3. With the same combination of diseases has gained flesh and strength during the summer.

4. *In being added, viz.*, C. H. had tubercle fifteen years before death, and was cured. He finally had an anal fistula. This was cured by operation; but his phthisis returned and he died shortly after. Remarked further that we now understand that tubercle involves a qualitative change in the blood, and this expends itself at intervals in the deposit of successive crops of tubercles in the lungs. Assuming that such a crasis exists, is it not better that it should expend itself at the anus than in the lung? If this deposit accumulates and expends itself at the anus, had we not better treat it constitutionally, and get rid of the tendency to deposit.

If we find, then, that these cases are associated with slow progress of disease in the lung, we should look upon them as salutary.

Prof. Rochester thinks that we may be going too far, even in denying a revulsive action to anal tubercle—having, with others, long abandoned depletion in phthisis, had had opportunity of observing salutary effect of a seton on the arm in retarding its progress.

Notwithstanding the discrepancy in the statements of some of the authorities just quoted, I think it may be assumed as the general opinion of the profession every where that fistula in ano is more frequently associated with pulmonary tuberculosis co-existing with it, preceding or succeeding it, than with any other single form of disease. This fact very naturally suggests the inquiry, what are the true relations of the two affections? Is the connection accidental, or is there some intimate dependence of the two morbid conditions? Do they occupy the relation of cause and effect? If so, which holds the position of cause? Or do they both stand related as effects of a common constitutional cause? Are there two kinds of fistula—one a casual suppurating sinus, another specific in its nature, tubercular, and therefore more closely allied to the pulmonary affection? Does the existence of anal fistula suggest a rational suspicion of predisposition to pulmonary tuberculosis?

These several questions embrace only one branch of the topic under investigation—the etiological relations of fistula and pulmonary tuberculosis. Another branch of the subject regards the therapeutic relations of the two diseases. What influence does fistula exert upon the pulmonary lesion? Is there reason to believe that simple suppurating anal sinuses have an influence different from that of tubercular fistula? How should fistula, whether casual, simple, or tubercular, be treated in reference to their effect upon the pulmonary tuberculosis?

To none of these questions is it possible to give a satisfactory answer, for the reason that a sufficient number of authentic cases, from which positive conclusions could be adduced, have not been recorded. This is a traditional topic of medical discussion, but one to which no special or sufficient investigation has been applied. I propose, however, to offer some remarks upon the several questions raised, sustaining and illustrating my conclusions by the cases reported and by the authorities quoted.

First. Is the connection between fistula and pulmonary tuberculosis casual, or is there some intimate dependence of the two morbid conditions? It will be noticed that several observers of the highest character, both European and American, have very rarely had fistula in their cases of pulmonary phthisis. Andral had but one case in eight hundred of phthisis, and Laennec and Louis consider it a rare and altogether accidental complication. In this opinion, Horner and Gross fully concur. On the other hand, observers equally reliable and accurate, have frequently found the two affections associated. The number of such observers is much larger than of those whose results are different; their field of observation, in the aggregate, equally large, if not larger. Certainly, in the United States, the two diseases often co-exist. This statement is partially sustained by the cases reported upon the present occasion by the members of the college. It is sustained also by the unrecorded experience of the profession. The proposition may be safely hazarded, that there are very few practitioners in this country, of even moderate clinical observation, who have not had a very much larger ratio of cases of phthisis, complicated with fistula in ano, than the statistics of Andral, Laennec and Louis show. It is probable that the complication is rendered somewhat more common in some parts of this country by the prevalent use of harsh and irritating cathartics.

It is certainly very remarkable that there should be such a discrepancy between the statements of equally competent observers. There must be an error somewhere, and though it may be considered a heresy to say so, your committee can not avoid the conclusion that Andral, Laennec and Louis have not looked into this matter with their usual care. It seems scarcely credible that fistula should have existed in but one of Andral's eight hundred cases, when so common in the patients of others.

We are warranted, I think, by the frequency of the concurrence, and by the peculiar circumstances attending it—circumstances suggesting intimate relations, and, indeed, almost compelling the inference of identity of cause, in assuming as a fact something more than accidental connection between fistula and pulmonary phthisis; something more close, for example, than

that which exists between an accidental fracture of a limb and tubercles in the lungs.

There is very generally some foundation in fact for popular opinions which have immemorially existed. They may be inaccurate and contain much that is erroneous, but yet much that is true. The remark applies to professional opinions of long duration with greater force perhaps, for the reason that the observations upon which such opinions are founded are usually more intelligent and reliable. The opinion that fistula and phthisis are associated in some other than a casual way, has long been entertained by the profession generally, and yet prevails.

What is the order of succession of the two affections? The cases reported and the histories of others which I have found detailed in various medical works show no fixed order of succession. In a large proportion of them, pulmonary tuberculosis precedes the fistula, and this order may be received as the rule. The date of precedence varies. Sometimes the fistula follows close upon the tuberculosis, in other instances more tardily, and even after a very long period. In a few, the two affections have seemed to arise cotemporaneously. On the other hand, the fistula sometimes and more rarely takes the initiative, the tuberculosis of the lungs following at periods equally variable, and occasionally at so long an interval as almost to warrant a doubt of the association of the one with the other. Yet these different modes of succession have been repeated with sufficient frequency to authorize the inference of a real connection.

We know too little of the intrinsic relations of these two affections, to express any decided opinion in regard to their etiological bearings upon each other. When phthisis has been followed by fistula, and this is known to be the fact in numerous instances; or, on the other hand, when fistula has been followed by phthisis, in fewer instances, but yet in such a way as to constrain the inference of a close alliance; when we know that some members of a family have been the subjects of fistula, some of phthisis, and some of both diseases, in a varying order of succession, the conclusion seems an almost necessary one, that the two affections occupy, in some way, the attitude of cause and effect. This, however, is probably not

their real relation in any case. It is possible to understand how the obstructed circulation through tuberculous lungs, and the cough arising from the irritation of tubercles, may, by their vital and mechanical action, lead to the formation of abscess about the rectum and consequent fistula; and, on the other hand, it is not difficult to comprehend how the drain of a large suppurating sinus about the anus, and the attendant pain and other irritation may wear down the strength and superinduce a tubercular deposit in the lungs and other parts; yet we apprehend that this is not the correct interpretation of the facts of the case. The more rational deduction from the premises is, that both diseases are the products of a common constitutional cause.

Are there two or more varieties of tubercle? Many cases, and probably a large proportion of them, are purely local, simple abscesses having their origin in ulcerated hemorrhoids, and rendered fistulous by peculiarity of position, and not connected with any constitutional dyscrasis. Others again have their origin in constitutional vitiations, and are really local expressions of general disease. I have consulted several of the standard authorities upon morbid anatomy, and do not find any reference to the deposit of tubercles about the anus; yet this is stated or assumed to be the fact by several very intelligent writers upon fistula in ano. Thus Ribes divides stercoral abscesses into the three varieties of tuberculosis, phlegmonous, and gangrenous. Dr. Austin Flint says: "It is doubtless true that many cases of anal fistula proceed from tubercular deposit in that region; but it is equally true that many cases are purely local, and do not invole any general dyscrasis." To these two kinds of fistula a third may be added, consisting of those cases which, in the first part of their course, are simply inflammatory, but become, as a state of general cachexia is developed, tubercular in their character.

Does the existence of fistula suggest a rational suspicion of a predisposition to pulmonary tuberculosis? When the fistula is known to be tubercular by the quality of the secretion from it, examined under the microscope, the existence of tubercles in the lungs is necessitated, after a certain age, according to the well known law of Louis. The question is limited, therefore, to simple non-tubercular fistula. The cases reported

show, in many instances, present and permanent exemption from tubercles; but, on the other hand, so many others are reported, in which tubercles have been developed, sooner or later, that, in the opinion of your committee, the existence of a positive fistula, at any period of life, is sufficient to awaken a suspicion—indeed, a reasonable apprehension of future pulmonary complication; sufficient to justify a watchful eye to the health of every subject of fistula, and the early administration of measures preventive of the tubercular dyscrasis.

Having thus rapidly disposed of the etiological relations of fistula in ano and pulmonary tuberculosis, it remains for us to consider their therapeutical bearings.

What influence does fistula exert upon pulmonary tuberculosis? Unfortunately, upon this as most other subjects of practical medicine, there is contrariety of opinion—opposite views are held. An opinion almost immemorially prevalent, and yet generally entertained, finds a correct expression in the language of Dr. Strong, in his paper upon this subject in the Buffalo Medical Journal for February, 1851, in the following formula, viz.:

"That the relations of fistula in ano to pulmonary tuberculosis are such that its presence either as antecedent to or coexisting with the latter is a desideratum, and to be sedulously cherished, having reference to its (pulmonary tuberculosis) prevention in the one case, and to its cure or favorable modification in the other."

A rule of practice the very reverse of this is advocated by many. The dogma, so called, expressed in the above formula, is thought to be unsustained alike by sound theory and correct observation. Fistula is considered injurious in all of its relations to pulmonary tuberculosis. Its prophylactic and curative influences are rejected, and it is advised to be "ignored, exorcised, cast out." In the language of the same writer, "to promise to one's self and to one's patient in a case of either foreshadowed or well ascertained tuberculosis any hope of escape from a fatal termination, predicated exclusively or mainly upon the perpetuating of an anal fistula, is to insure a revenue of chagrin and of sorrow, and perhaps of reproach, which is all the less to be coveted, because the mistake, though admitting of repentance and non-repetition, does not admit of

reparation." A middle ground is occupied by some, who consider fistula a casual concomitant of pulmonary tuberculosis, and not exerting any special or important influence upon its development or progress, or, though considered as more intimately related, it is, nevertheless, deemed neutral or inoperative, so far as the pulmonary disease is involved.

These several opinions are respectively sustained by arguments and facts more or less sufficient to give them an appearance of plausibility, or even of justness. They who consider fistula a salutary complication, sequence, or precursor of pulmonary tuberculosis, explain its mode of action in several ways. When simple and non-tubercular, when the ulcerative product is the pus globule, they explain its salutary influence upon the principle of derivation or revulsion; when it is tubercular, and therefore a local expression of a general dyscrasis, "it serves as a vent or safety-valve for the deposit and removal of tubercular matter, and thus, by vicarious actions, preserves the more vital organs, the lungs, from its ravages."

They who hold the opinion that fistula is to be recognized as an injurious associate of tubercular phthisis in all of its stages, do so in accordance with the received pathology of the tubercular crasis, that of asthenic mal-nutrition; they contend that the fistula increases this asthenia, still further enfeebling the system by its irritation, and exhausting it, in many instances, by its profuse drain. They attach very little value to the derivant or revulsive action of the fistula in simple suppurative cases, and look upon those instances in which the fistulous surface is an outlet for the tubercular accumulations in the blood as so rare and exceptional as scarcely to merit appreciation. They further urge that the proper treatment of pulmonary tuberculosis educed from the pathology now most generally accepted, consists in the use, on the one hand, "of means that look both to restoring and maintaining intact the animal and vital functions as well as to eliminating the tubercular dyscrasy which constitutes the essence of the disease, and on the other, in the avoidance and abatement of every abnormal action and process, and of course fistula in ano *as such*."

The pathological views upon which this treatment is based

are doubtless true, and should be carried out in the management of every case of pulmonary tuberculosis. When the irritation and drain of fistula are such as unquestionably to produce or increase asthenia, their abatement is indispensable; when it is clear that the vital powers are failing under the influence of this special morbid condition, it is the obvious dictate of common sense that an effort should be made to withdraw so hurtful a complication. It is generally true, however, that the fistula does not occupy so conspicuous and important a position in the list of debilitating influence; the local and constitutional irritation, and the purulent drain are rarely such as to produce very marked effects upon the vital powers; more commonly the fistula seems either negative or positively beneficial in its general influences. Let its action be what it may, fistula can not exclude the use of all such measures as the improved therapeutics of the present day require. No one is so absurd as to advise an exclusive reliance upon the fistula as a prophylactic and curative means in pulmonary tuberculosis, and even they who cherish its presence as salutary, look upon it as a useful auxiliary only, keeping the pulmonary affection in check somewhat, possibly, and giving more time for the use of remedies more strictly subversive of the tubercular cachexia.

An opinion founded upon an indefinite general experience prevails that fistula prolongs, if it produce no other effect, the duration of phthisis. This opinion is certainly sustained, to some extent, by many authentic cases. The testimony of Theophilus Thompson, quoted above, is explicit and conclusive, as far as it goes, upon this point. It affirms it and gives it a claim to respectful attention, which it has not heretofore had. A sufficient number of cases, however, have not been collected and analyzed in reference to this special point, to place it beyond dispute. For this reason, they who maintain the even hurtful influence of fistula assert that "cases of prolonged tubercle, other than those associated with anal fistula, are not uncommon." This is true, and while we are very well satisfied that a further investigation of the matter will give support to the affirmative of the proposition, it must yet be considered an open question.

An argument from analogy has been used by those who

consider fistula incapable, by its revulsive, or derivant, or excretory action, of preventing, mitigating, retarding, or curing pulmonary tuberculosis. They rank tubercle, schirrus, and melanosis in the same category, belonging to the same class of heterologous diseases, and obedient to the same kind of therapeutics.

To quote from the paper of Dr. Strong, "unendowed with and unsusceptible of vitality per se, they are only potent to destroy the vitality of the tissues wherein they are deposited, consisting of a blood dyscrasy consequent upon some lesion of nutrition, and being non-hyperemic in their origin and essence, they (schirrhus and melanosis) thus bear a strong analogy to tuberculosis. But who has ever recommended either of them to be treated by counter-irritants, or by revellent or derivant discharges? When was it even thought expedient to institute an issue or seton, or cherish or perpetuate what is equivalent, an anal fistula, in the hope of forestalling when anticipated, or of favorably modifying when actually existing in either of these? And yet so analogous are they to tubercle, in their sources and mode of development, in their incidents, accidents and concomitants, that it would seem to be obvious that the same general principles of treatment should obtain in their case as that of tubercle." The analogy claimed by Dr. Strong fails in one essential particular. The natural history of tubercle differs from that of schirrus and melanosis in the very matter now under consideration. Fistula is often spontaneously developed in the progress of tubercles of the lungs, rarely, if ever, in the progress of schirrus and melanosis. If it were a common precursor, concomitant or sequel of the latter, and seemed frequently favorably to modify their course, to prevent their development, to protract their duration, and even sometimes to arrest and cure them; if the fistula were often followed by schirrus and melanosis and the sequence were such as to suggest the possible relation of cause and effect, the analogy would be stronger than it is, the argument have a more logical basis, and the therapeutics educed a more substantial foundation.

It may be readily inferred from what has been said that your committee *inclines* to the opinion that fistula in ano is, for the most part, salutary in its influence upon tuberculosis of the

lungs. As yet, paucity of facts forbids a positive opinion; the subject requires and is worthy of further study; for the present, in his view, there is a preponderance of reasons for the practical acceptance of the traditional opinion embodied in the formula quoted above.

To the question, "is there reason to think that simple anal sinuses, whose secretory product is the pus globule, have a different influence from tubercular fistula," it is not possible to render an answer sustained by cases. This distinction in the forms of fistula has never been practically recognized; future observation, aided by the microscope, will be requisite to elucidate the question. It is rational to infer that tubercular fistula, whilst they indicate a more profound vitiation of the system, exert, at the same time, a different influence from that of more benignant sinuses.

How should fistula, whether casual, simple, or tubercular, be treated, in reference to the pulmonary tuberculosis? Should it be let alone, or should curative treatment be instituted? The former course, it seems to your committee, is the safer general rule of practice. In persons strongly predisposed by inheritance to tuberculosis, and in those who are already the subjects of it, fistula in ano, of whatever variety, and whether viewed as a mere casual complication, or as holding some more intimate relation, should be touched with cautious hands. When such patients are obviously better—when there is reason to believe that the pulmonary symptoms have been averted or prevented by the development of fistula, it is the plain dictate of common sense not to interfere with the fistula, even when the fistula seems negative in its influence. This rule is a safe one. It is only in those cases, which may be considered the exceptional ones, in which the fistula, by its irritation or drain, is palpably sapping the strength, and in this way superinducing tuberculosis, that the curative interposition of the surgeon should be invoked. This rule of practice subjects the patient with fistula to the indefinite toleration of a troublesome and disagreeable malady. It is better, however, to do this than to hazard a worse condition. It is, after all, but a choice of evils, a decision between a painful external disease, and the possible superinduction of an incurable internal malady.

This question has reference, of course, to fistula occurring in

those having a strong tubercular tendency, or in the earlier stages of developed tubercle. The attempt to cure when the lungs are extensively disorganized, would not be entertained by any physician of ordinary discretion.

The rule insisted upon is predicated on the hypothesis that anal fistula occurring in the tuberculous subject is generally susceptible of cure by operation. This, however, is not the fact. In such patients, the operation, whether by ligature or knife, often fails. A somewhat painful operation is submitted to by feeble subjects, to no good purpose. This is no unimportant or trivial argument against attempts to cure. It is well worthy of consideration when the propriety of an operation is a question with the practitioner.

Moreover, failure in the operation is not always merely a negative matter; it is often positively injurious. The opinion of Quain on this point inculcates a valuable practical precept: "Where the symptoms, then, of tubercular disease of the lungs are present, the operation for fistula is not allowable. It seems probable that the constitutional state in which ulceration of the mucous membrane of the rectum is prone to occur spontaneously, would not be favorable for the reparation of a sinus after an operation. But, be this as it may, the wound does not heal;—the sore is but enlarged, and the surface secreting pus augmented. In short, the operation fails, and, in failing, adds to the evil."

All of which is respectfully submitted.

LEWIS ROGERS.

Mr. Editor:

As several medical journals have recently called attention to M. Cleassaignac's treatment of hemorrhoids by the use of the ecraseur, I am induced to present to your readers what I regard as a more excellent way, making the operation an exceedingly simple one—almost bloodless—and rarely, if ever, preventing attention to ordinary business.

This operation consists in dividing with the scalpel the integument, whether cuticle or mucous membrane, covering the tumor to an extent in length of incision, about double that of the tumor, carefully avoiding division of the vein; gently sepa-

rating with the handle of the scalpel the sides of the tumor from the cellular tissue; and then, with a small goose-bill forceps, seizing the tumor and jerking it out. The dilated knuckle of vein constituting the tumor, brings with it from one-fourth to half inch of the vessel on each side of itself. The vein usually retracts instantly without the escape of a single drop of blood from either of its ruptured extremities. A piece of wet lint applied for a few days completes the cure.

This operation was first performed, so far as I know, on myself in 1851, by a young professional friend under my direction, conducted by the aid of a mirror, and without interruption to attendance upon a large country practice.

In 1853 it was again attempted in another attack by a student in my office, who failed in the essential point. He opened the vein and merely removed the contents of the tumor. I was obliged to mount my horse immediately afterwards, and ride about thirty miles over very muddy roads, extending my absence from home to a period of nearly twenty-four hours, during the whole of which time blood escaped slowly from the incision, and severe inflammation followed. Quite a number of tumors were quickly developed, some of them at a point several inches above the external sphincter in the bowel, threatening destruction of life for awhile. Relieved by the application to the anal region of a dozen leeches, but complete recovery was tedious, occupying some months.

Since the first operation I have removed about thirty tumors in this manner, with trifling pain, and without loss of blood, except from the division of integument, and without confinement in a single instance.

I have avoided its performance while considerable surrounding inflammation existed, first reducing that by laxatives and leeches when necessary.

This operation, I am confident, will be found by all who will try it in the manner here recommended, and under the conditions named, to accomplish all that is attainable or desirable by operative procedure, without any of the difficulties which the ecraseur is designed to obviate or avoid.

F.

Shelbyville, Ind., Aug. 11, 1859.

The Tonic Properties of Hypophosphite of Quinia. By ARCHIE B. COOK, M.D., *Demonstrator of Anatomy, University of Louisville.*

This new combination was presented to the profession last May by Prof. J. Lawrence Smith. I prescribed the remedy in three cases of phthisis. The first case was in the last stage of the disease, very much emaciated, with hectic, and colliquative diarrhœa. For a month previous, his treatment had been cod-liver oil, whisky, and hypophosphite of lime; the latter salt appearing to impair the appetite and increase the burning sensation he referred to the stomach, I ordered on the 15th of June, hypophosphite of quinia in five grain doses three times a day, dissolved in distilled water. The remedy was continued as directed, with apparent benefit, until the 12th, when he complained of tightness or distension in the head, and ringing and buzzing in the ears. These symptoms began to manifest themselves the day previous, but were not fully developed until the 12th. He had, in seven days, taken 105 grains. On the sixth day of exhibition he had symptoms of quininism; on the seventh he was unmistakably cinchonized. The remedy was then suspended for two or three days, and again resumed in the two grain doses three times a day. In the latter part of the month he had an attack of acute diarrhœa, which, with the hot and oppressive weather, again prostrated him.

During the use of the remedy he felt better, complained less of indigestion, had a better appetite and less hectic.

In the other two cases in which the disease had not so far advanced, the remedy, administered in doses of two and a half grains three times a day, acted as a good tonic, in conjunction with cod-liver oil and whisky. My own limited experience in the use of the hypophosphites does not lead me to believe that any one of them is a specific in phthisis.

As a tonic, stomachic, and anti-hectic, I would give the preference to the hypophosphite of quinia.

I had not an opportunity of testing its effects in an uncomplicated case of intermittent or remittent fever; but, judging from its prompt constitutional influence in the first case in which it was administered, I would have confidence in its anti-

periodic powers, and think it might safely be substituted for quinine, especially in cases of constitutional idiosyncrasy, or in chronic cases where the sulphate has been taken in large quantities. In convalescence from acute disease, and in acute cases occurring in miasmatic districts where antiperiodics form a necessary part of the medicinal regime, this new preparation might be used with much advantage.

Pharmaceutical Department.

By T. E. JENKINS, Pharmaceutist.

Stramonium.—As this is the season when this valuable herb should be collected, we desire to call attention to its general properties as a medicine, and to the preparations in which its virtues are most prominently displayed.

The plant, commonly known by the name of "Jamestown weed" in this country, and "Thornapple" in England, is one of the most interesting and beautiful of all the "weeds" which flourish around us, on account of its great vigor and luxuriance, and the beauty of the flower it bears. On account of its great exuberance in growth, especially in rich soils, it is often called a "rank weed."

The medicinal properties reside in all parts of this plant, but the leaves and seed are mostly used in this country. The seeds appear to be the most active portion, and are usually employed in the form of tincture. The leaves, however, are used for the preparation of the extract and the ointment.

The active principle is called daturia, and exists in the seed in the proportion of about 1-50 of one per cent., and is very similar to, if not identical with, atropia, the alkaloid of belladonna.

This medicine acts as a narcotic, with cerebral disturbance, when administered internally, and has been employed with benefit in the treatment of diseases which are dependent alone upon irregular nervous action. It has been found to give relief in neuralgic and rheumatic affections, spasmodic asthma, dysmenorrhœa, etc. It is especially useful in asthma, in which

complaint, when employed during the paroxysm, it is found to give great relief. Any portion of the dried plant may be used in this disease, and should be used by fumigation; a small quantity smoked alone or mixed with tobacco in the form of a segar or in a tobacco pipe. This remedy should never be used by persons in whom there is a determination of blood to the head.

As an external application the extract may be substituted for belladonna, for the purpose of dilating the pupil, and it is said to be equally as efficacious as the latter remedy. It has been highly recommended in the form of ointment or poultice in the treatment of tinea capitis, hemorrhoids, inflamed tumors, etc.

Dose of the powdered seeds 1 grain three times a day. Dose of powdered leaves two to three grains.

Much larger quantities of these have been given without dangerous effects.

We give below some of the more useful preparations of this important drug:

Extract of stramonium leaves.

Extract of stramonium seeds.

The extract of the leaves is readily made by bruising the leaves in a wooden or marble mortar, with the addition of enough water to form a pasty mass, expressing the juice, heating it nearly to the boiling point, straining and evaporating over a gentle heat to the consistence of an extract.

The extract of the seed may be made by exhausting them in powder with diluted alcohol, distilling off the alcohol, and evaporating the residue to the consistence of an extract. The leaves will generally yield from every pound about half an ounce of extract.

Dose, a grain night and morning, gradually increased.

The seed will give for every pound used a little over two ounces of extract when extracted with diluted alcohol.

Dose, one-half that of the extract of the leaves.

Ointment of Stramonium.—This preparation may be made either by heating the leaves in lard until they become crisped, and straining, or by mixing the extract of the leaves with lard

or simple ointment in the proportion of one part of the former to eight of the latter.

This ointment is a very excellent anodyne application in some skin diseases, irritable sores, and in the treatment of hemorrhoids, and as a medicament in the latter complaint it forms an ingredient in many of the useful compound ointments for piles. A very useful one is made after the following formula:

℞ Extract Stramonii fol. ʒi.
Pulv. Gallæ ℈i.
Axungiæ ʒi.

M.

Instead of the powdered galls, tannin in proper proportion may be used, and occasionally ten or fifteen grains of finely powdered acetate of lead may be introduced, or half an ounce of freshly prepared ointment of subacetate of lead can be incorporated, but the best form for a "pile ointment" is not to use any lard or greasy substance at all, but to employ instead a solution of starch in glycerine in the proportion of one dram of the former to one fluid ounce of the latter;—a heat of 240° Fahr., with constant stirring, will give a homogeneous mixture, and will furnish a very valuable substitute for lard or cerate in the above as well as in many other ointments.

Editorial Department.

British Medical Association.—The British Medical Journal for 6th August gives detailed accounts of the meeting of the British Medical Association, which was held at Liverpool from the 27th to 29th of July. A perusal of these proceedings is calculated to awaken in the bosom of every American physician a feeling of pride in the success of our own national association.

Dr. Wynter, in speaking of the late meeting, says: "If the presence of large numbers of associates, and the prevalence of good feeling and generosity, may be considered to constitute

success, the Liverpool gathering of the Association must be considered a most decided triumph;" and yet the whole number in attendance during the three days of session did not amount to two hundred, scarcely exceeding our most thinly attended convocations. But a point of comparison most strikingly favorable to us is the financial status of the two institutions. Our association is not only out of debt, but, thanks to the excellent gentleman and vigilant financier who guards her purse strings, has a snug little sum on the credit side of her bank account. Our transatlantic brethren are less fortunate in their pecuniary matters, and are burdened with a debt of some $1500.

As in our own body, questions pertaining to medical reform and medical education, have occupied a large share of the attention of the British Association, yet there are no indications from their printed minutes that any of their universities or medical schools are so apprehensive that these reforms may damage their popularity, that they stand aloof from them, as in this country.

It must be a great comfort to certain physicians of our old mother country to feel assured that there is no medico-ethical code common to the empire—to be able to quiet any possible perturbations of their consciences, on account of violations of ethical propriety, by stating that the laws they infringed were petty, because they were merely local, and that some neighboring town had failed to insert any such articles as those they had disregarded; and, probably emboldened by the success of one transgression they might go a little beyond, and get up some enactment for their own especial benefit. A witty lawyer of this State, in a discussion with a clerical gentleman who had boasted that he was one of the principal agents in the work of Bible revision, advised him to insert a clause for his own benefit, as the old version did not contain a single assurance by which his salvation could be secured. How convenient some of these free and easy medical men would find it to be placed on a "*revision committee.*" Of course we apply these remarks to physicians of Great Britain only upon the general assumption that human nature is very much the same there as here, where we know that the "terrible code" which now, alas! reaches from sea to sea, places so heavy a yoke upon the

quickly galled necks of some of its subjects, that we would not wonder if the tide of emigration should be reversed, and they should seek for milder laws and more lax discipline on the shores of merry old England.

We have received from Dr. Fishback a series of spirited tracts upon the subject of medical education. Dr. Fishback's unwearied labors in this cause should obtain for him the thanks and co-operation of the medical profession, in so far as they may find his efforts to be in the line of real progress. We have upon another page given more full and plain expression of our opinions with regard to some of these papers. We subjoin a medical reform bill, which the physicians of Indiana have recommended to their Legislature for adoption:

PLAN OF LEGISLATION *Proposed by the Chairman of the Committee to the Legislative Committee for the Protection of Community against the Incompetency and Recklessness of Practitioners of Medicine, Surgery, and the Apothecary's Art.*

1st. Create, by statute, a Board of Examiners, seven in number, to be selected by the State Medical Society, from amongst eminent medical men, not residents of the State. The Board to meet once or twice annually at the capital, at stated times, for the public oral examination of all future candidates for the practice of medicine, surgery, and of the apothecary's art; one on Anatomy; one on Physiology and Medical Jurisprudence; one on Pathology; one on Materia Medica, Pharmacy, and Chemistry; one on Practical Medicine, including diagnosis; one on Surgical Anatomy and the principles and practice of operative Surgery; and another on Parturition and the Diseases of Women and Children. Let the examinations be thorough, free from partiality or undue leniency; and let a very nearly unanimous judgment of the Board be requisite to authorize a certificate of qualification to issue from said Board to the Secretary of State; who shall, thereupon, issue a license to practice medicine, or surgery, or the apothecary's art, as the case may be. The candidate for the latter being examined only on Materia Medica, Pharmacy, and Toxicology.

2d. Forbid, on penalty of fine and imprisonment, any one from hereafter commencing in this State the practice of these arts, without such examination and license duly obtained.

3d. Remunerate examining Board from State treasury; providing the means therefor by a license fee of $20 to $50, as

may be required; to be paid into the treasury by each candidate for examination.

4th. Require the vendors of Patent and other Medical Compounds to place on every package or parcel offered for sale, the names and proportions of each and every ingredient, in plain English.

5th. Allow the dissection of the bodies of criminals and paupers by medical men and their students.

"A Fair Proposal Unfairly Treated."—Under this caption the editor of a literary paper in Philadelphia takes the Board of Guardians for the poor to task, for rejecting the offer of seven homeopaths, who desired to have charge of the medical department of the alms-house, and proposed to bear upon their own shoulders the whole burden of expense, thus relieving the city of an annual tax of $12,000. The Board of Guardians promptly voted to lay the proposition on the table. We have no doubt but that the guardians of the poor acted conscientiously in their refusal to accept the proffered liberality, for we believe that our medical brethren of that city bear along with them such marks of skill and full capability for the discharge of all the responsible duties of the profession, that the Guardians of the poor as well as the community around them, would feel satisfied that any irregularity which proposed to do more than their own medical faculty, was expletive and meddlesome—that which counselled to do less they would justly esteem inadequate to the wants of the sick, consequently they could not accept the nullities of homeopathy, even when offered without price or reward, since, by so doing, they would not fill the measure of a duty which required them to provide a genuine charity operating for the removal of suffering—the relief of disease and the preservation of life.

In the review, which appeared in our last issue, of Churchill's treatise on the immediate cure and specific treatment of pulmonary phthisis, we omitted to mention the source from which we obtained the publication. We are indebted to the courtesy of the publisher, J. Winchester, 43 John street, New York, for copies of the work. Mr. Winchester has, by his own enterprise, placed this valuable treatise within reach of the med-

ical profession of this country, and has thus rendered us an important service. The work is bound in paper, easily transported by mail, and may be obtained by correspondence with the publisher.

We have received a copy of the "Transactions of the Indiana State Medical Society at its tenth annual session."

David Hutchinson, M.D., was elected President, and Drs. Sloan, R. M. O'Ferral, J. S. McClelland, and R. E. Houghton, Vice Presidents.

The subject of medical education seems to have commanded especial attention, and resolutions were adopted with a view of holding an extra meeting of the society before its next annual convocation, at which it is proposed to call for action from the next Legislature "in behalf of the public good." Local medical societies are also urged "to agitate the subject in their respective localities." The general principles of the report of Dr. Fishback from the committee on medical education having been concurred in, we naturally turn to a brief examination of those principles. Their gist seems to lie in the necessity for "legislative action, a longer course of study in the medical schools, and efforts on the part of the physicians to enlighten the community." "Our medical schools, looking only to pecuniary consideration, have become the nurseries of quackery." "No school of medicine has a right to place upon an equal footing before the world, a ripe scholar, whose mind is well disciplined and stored with the richest gems of learning, and a dunce, who has dreamed away his life aud wasted his energies and substance in riotous living, and yet not a year passes that this is not done by every school in the Union."

These are severe strictures, and with many others of similar import but more harshly expressed, appear to have been introduced as texts furnished by Dr. Fry, a member of the committee. One would hardly expect that the first paragraph of the discourse under such circumstances would read: "One of the most distinguishing characteristics of the last half century, whether the domains of science, art, or letters be regarded, is *progress*. To such extent is this true that the adept, in almost any department of fifty years ago, would be but a tyro now.

We rejoice in this fact, and think we see yet wider fields for the future display of this grand characteristic of the age, especially in physiological, pathological, and therapeutic science and art; and most particularly so in the department of medical education, embracing both preliminary and professional instruction and training. The last only concerns us now."

The reader might suppose that this was a sarcastic commentary upon another text which had been furnished: "So long as every broken down mechanic, merchant, farmer, and the illiterate, uneducated, can enter the profession through our medical schools by the expenditure of a few hundred dollars, we may not hope to succeed in our efforts at elevating our standard of qualifications;" but in the context he would discover his error, and in seeking a solution of the paradox he may be enlightened by learning that "some are on the track to a *rational* system;" and "as an example now about to be attempted practically, we may mention the medical department of Lind University at Chicago, Illinois, where students are classified and taught accordingly—the terms lengthened, the number of daily lectures diminished, examinations more thorough, and the four years of real or sham practice in lieu of the first course of lectures abolished," etc. Now we submit that, after such severity regarding the recklessness of examinations "in every medical school in the Union," however delightful and promising of a millennial period approaching, it may be to be informed that in Lind University "examinations are more thorough," the curious would desire to know how the reporter received his information on this point, for no examination of any kind whatever has ever been instituted in that embryonic school.

We desire as earnestly as the members of the Indiana State Medical Society can do, to see our profession what God and humanity alike demand it should be, but we can not concur as they have done in denouncing that profession as "Jackasses" and "ninnies," and, at the same time, urge these very jackasses and ninnies to "enlighten the community."

We can not concur, as they have done, in coarse denunciation of professors, and attribute to them a grade of morals which a thief might take offense at. Their inhumanity we have not witnessed, and with all deference to the wisdom of

our sister State, we would suggest that more courteous and dignified language might be found than such as abounds in this report, which has at least one great merit, to-wit, a proof, if one were needed, that a higher grade of education is really required. The associations of the committee must have been of a very unfortunate character, for, assuming the truth of their premises, the craft in Indiana are a very low class of people, but for ourselves we have not had the misery to meet such people, and our idea of the medical profession leads us rather to respect and love it, than to denounce and degrade it. What may be the issue of the "conflict" so vividly depicted, and the "marshalling of hosts," and the fixedness of eyes at the great armageddon, where the issues of "life and extermination" are to be decided, we wot not, but if the fight is to be conducted with such weapons as announce its approach, the warriors will only find a wind mill.

We deeply regret to be compelled to take such a view of the means employed to effect an end that we will seek to effect in our own way, as earnestly and faithfully as the committee could wish, but, feeling as we do, that such reports are calculated to do serious injury, and retard the progress of reform, we can not remain silent even when, as in this instance, they proceed from friends and gentlemen for whom we entertain the highest respect.

"The Druggist" is the title of a neat "monthly newspaper for the trade," which we have failed to notice heretofore, but not because we did not recognize and appreciate its merits. We commend it not only to druggists, but to physicians. It is published at Cincinnati, O., at the low price of one dollar per annum.

"The Dental Cosmos, a Monthly Record of Dental Science" —a monthly of 56 pages—published in Philadelphia, and edited by Drs. White & Ziegler, and J. H. McQuillen, D.D.S., has just been issued. We exchange with pleasure, and wish it a full measure of success. Price, $2 50 per annum.

Semi-Monthly Medical News.

VOL. I. LOUISVILLE, KY., SEPTEMBER 15, 1859. NO. 18.

Report on Ovariotomy, *read before the Kentucky State Medical Society, at its annual meeting at Louisville, April*, 1857. By J. Taylor Bradford, M.D., *Augusta, Ky.*

"Go to the Parthenon and find, not what bunglers, but what great men have left undone."—Sculptor to his Pupil.

Manchester, England,
December 15th, 1856.

My Dear Sir:

I have just received your kind note, dated November 23, 1856, and have to thank you for the many kindnesses therein expressed. When I wrote last to you I was busy preparing a small volume entitled "Hand-Book of Obstetric Operative Surgery" for the press, intending to follow it up by a larger work on ovariotomy, stating my experience in full. With great difficulty I found time to complete my Hand-Book (which I hope by this time you have seen), in which you will find a long chapter exclusively devoted to ovariotomy. But I need scarcely tell you, my increasing professional engagements interfere so seriously with my time, that I can scarcely attend to any thing that I am not really compelled to;—otherwise, I have abundant material to communicate to the world, which I imagine would be desirable.

I am delighted to hear of your great success, *far* exceeding even my own;—indeed, I almost envy you and Dr. Dunlap, and earnestly hope for its continuance. I have not yet given up my intention of publishing my ovarian work. It is only waiting time, not inclination, to complete. In the meantime

I can only add a few particulars to my last statement of cases, which now amount to seventy-six, and may be read thus:

Of first 20, 8 died—12 recovered.

Of Second 20, 6 died—14 recovered.

The last 36, 9 died—27 recovered

I believe this is the legitimate mode of viewing the question (progressively) by which the mortality is shown to be gradually lessened by practical experience, thus:

First cases, 1 death in $2\frac{1}{2}$.

Second cases, 1 death in $3\frac{1}{2}$.

Last, 1 death in 4.

I should like you to refer to my new Hand-Book for such practical hints as I have from time to time elicited by practice, and I will write to my publisher to forward you a copy.

I am entirely of your opinion, that the cases require great care in selecting, and should not be operated upon *merely because they are ovarian.*

I have little to say as to the want of credence in those who take ground against the operation. I can, however, with pride and pleasure, refer them to many men of the highest standing in my own country, amongst them Prof. Simpson, Dr. Bennett, of Edinburg, Dr. R. Lee, Safford Lee, and a list of hundreds who have communicated with me on the subject, as to my veracity, not forgetting Professors Lee, Z. Channing, with Dr. Atlee, in your own land.

The opposition in England to the operation is fast giving way, and I trust it may be said, that in legitimate cases there are few surgeons here who oppose it. I can not at present do more than give you this short resume'.

I have some few cases under my care on which I expect very shortly to operate, and I trust I shall be as successful as I have been, if not more so.

With kind regards and best wishes for your continued success, I am, my dear sir,

Yours most sincerely,

CHARLES CLAY, M.D.

Dr. J. Taylor Bradford, *Surgeon, Augusta, Ky., U. S.*

I regret to say that I have not received the "Hand-Book" alluded to in the above letter of Mr. Clay.

Dear Sir:

In reply to your letter of 24th ult., I have to say that I regard ovariotomy as fairly within the precincts of regular surgery. Ohio, it should seem, holds a prominent rank in the operation. Very respectfully, R. D. MUSSEY.

Cincinnati, Jan. 1, 1857.

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Extract from a letter to me by Dr. Blackman, Cincinnati, Jan. 2d, 1857:

"If you see the Western Lancet, you are probably already aware that I regard ovariotomy as a justifiable operation in suitable cases. I would not operate in a case of encephaloid disease of the ovary; and I would not persevere in an operation already commenced, should I find very extensive adhesions, for I have seen a patient, from the breaking up or rather dividing with the knife such adhesions, die on the table. I saw such a case occur to Dr. ——. I was one of his assistants." Truly yours,

GEO. C. BLACKMAN.

—

Dr. Bradford:

I have received yours asking for the results of my observations upon the operation for ovarian tumors. Upon this subject it is not in my power to say any thing from my own experience in favor of the operation.

Many cases in the early stages of enlargement have been under my care, wherein medical treatment removed the enlargement, and restored the health of the patients, while others of protracted existence, of malignant growth, or of complex organization, attended by great enlargement, have offered me no evidence in favor of an operation. It is proper, however, to observe that in reference to these, my observations have been limited, as you will infer on being advised, that in a practice of five and forty years, embodying every variety of surgical practice, I have operated upon one case only. The tumor appeared to occupy the entire abdominal cavity, and was organized throughout. The patient died on the fourth or fifth day after the operation, and possibly might have recov-

ered under the advantages of good nursing, directed by professional skill, neither of which were at command.

With great regard, very truly your friend,

B. H. DUDLEY.

DR. J. T. BRADFORD, *Augusta, Ky.*
Lexington, Jan. 4, 1857.

—

LOUISVILLE, JAN. 17, 1857.

My Dear Sir:

I feel that I owe you an apology for so long delaying to answer your letter of the 24th of December last. The fact is, that I have been reluctant to write on the subject to which your letter relates, because I have scarcely formed any very decided opinion on many points connected with it.

Of the propriety and necessity of ovariotomy in certain cases, I have no doubt; but to confine the cases with precision, for the guidance of those who may be debating the matter in their minds, and need to be helped to a proper decision, is, I apprehend, a difficult task. It is, I think, perfectly clear that no patient with a diseased ovary, who does not suffer much inconvenience from her malady, and is yet capable of enjoying life and contributing to the happiness of others, ought to be advised to the risk of so dangerous an operation. But, on the other hand, if the operation be deferred until life itself is a burden, the chances of its successful performance are greatly diminished, and to decide exactly how heavily this burden must press before we shall be justified in resorting to the knife, is a very nice point, and one the decision of which involves, of course, much responsibility.

Probably future and more extended experience may clear up the obscurity that now perplexes this view, and dissipate or at least diminish other difficulties that embarrass the whole subject. At present, while I entertain the opinion that under certain circumstances the extirpation of diseased ovaria is a justifiable operation, I should feel at some loss were I called upon to decide the conditions, though I might be able to apprehend them in practice.

My own personal experience in ovariotomy is very limited, being confined to three cases .In one of these, operated upon by Dr. Dudley, many years ago, the patient survived the re-

moval of the tumor only a few days. The second occurred in the practice of Dr. Gross, and was likewise followed by fatal termination. The third was my own case, which had a more fortunate result, the patient entirely recovering. I say fortunate, for I do not ascribe the issue to my superior skill, but purely to luck.

I might have performed the operation several times since, but I confess I have not any decided wish to repeat it, but have rather been disposed to evade it, or, as we sometimes say, dodge it.

Do not, I pray you, think me a surgical poltroon on account of this confession, but attribute my hesitation rather to the want of clear and satisfactory perception of the line of surgical duty.

Hoping that your report may enlighten me, and be alike creditable to yourself and the society.

I remain, my dear sir, your friend,

H. MILLER.

—

New Orleans, March 30, 1857.

My Dear Sir:

Excuse me for not replying to yours of the 7th of February sooner, asking my views on the propriety of ovariotomy. Pressing business at the time it was received compelled me to lay it by, and the subject passed from my mind until now. You are perhaps aware that I am the advocate of a new method of curing ovarian dropsy, which obviates the pain and danger of ovariotomy fully as much as Civiale's method of removing stone from the bladder obviates the pain and danger of lithotomy.

But as Civiale's invention is not applicable to all cases, neither is my method—practiced with success in one case—of treating ovarian encysted tumors, by reaching them through the Fallopian tubes, practical in all cases. Perhaps it is applicable in only a very few. You might naturally expect me to be among those who are disposed to magnify the dangers attending excision, to attract the greater attention to the discovery of a method of cure void of either pain or danger. But I am not among them. I am in favor of the McDowell operation when it offers the only chance of saving the life of the patient. I

call it the McDowell operation, because he was the first surgeon to perform it with success for encysted abdominal tumors, requiring for their extirpation the whole abdominal parietes to be laid open from the sternum to the pubis. The tumor, removed by Dr. McDowell, of Danville, Ky., from Mrs. Crawford, weighed fifteen pounds, and the cure was complete in about a month. The operation was performed in the year 1809, yet in 1826, the fact that such an operation had been performed with success by a physician in an obscure village in Kentucky, was not fully believed either in New York or London, although McDowell, as also the two Smiths, Nathan and Alban, had, in the meantime, performed a number of operations of the kind with success. The London medical journals sneeringly noticed McDowell's cases, which Mr. Lizars had appended to his work on ovarian disease, published in 1825. A New York physician in a monograph on the same subject, published in the Medical Recorder of Philadelphia, vol. x, p. 262–269, 1826, noticed these sneers of the London editors, and expressed a "*hope*" (italicizing the word) "to see Dr. McDowell come out well in the affair, and make good his claims."—p. 267. The editor of the Medical Recorder, Dr. Calhoun, at the conclusion of the article, assured his readers that there was no doubt in regard to the cases reported by McDowell, as he had been assured of their truth by communications of the most respectable character from Kentucky. But because some cockney editors of London chose to sneer at McDowell's cases of successful ovariotomy fifteen or sixteen years after they had been reported and duly authenticated, the New York physician seemed to think it was incumbent on McDowell to make good his claims —claims which he had already made good so far back as 1809, when he cured Mrs. Crawford, by an operation requiring an incision from sternum to pubis through the walls of the abdomen.

So long did it take truth to travel from Kentucky to New York, and so strong were London sneers against it when it got there, that Mrs. Hunt, a patient of three New York physicians, was permitted to die a miserable death without getting the benefit of that truth, her physicians looking on and giving their assent for her to suffer and die without surgical aid, with a disease which McDowell had proved to be a remediable ailment

by his success with Mrs. Crawford and others. The London editor's sneers were too strong for the Kentucky editor's facts with the New York physicians, and they let her die without attempting ovariotomy to save her. On examination after death, they found no adhesions of any consequence, and "*posteriorly*" (to use their own words) "*the attachments easily yielded to the fingers, and we rolled out the huge mass almost without the aid of the knife.*" "Its attachment to the body was by two pedicles, not larger than a finger, on the orignal site of the ovarium."—(p. 265.) See Medical Recorder, vol. x.

At a later period, in the year 1828, Dr. Foreman, of New Jersey, reported a case (in the Medical Recorder, vol xiv, pp. 366 and 377) of ovarian dropsy, which he tapped a number of times, drawing off, at different times, upwards of twenty gallons of dark colored, viscid humor, and which, after five months suffering, terminated fatally. On examination after death "the position of the tumor in the abdomen was found to be anterior to all the viscera, and its adhesion to them was so slight as to require the scissors in one place only to free it, when it rolled out a huge fluctuating mass upon the table."—(p. 369.)

In reporting the case, Dr. Foreman, seeing how slight the adhesions were, very correctly concludes, "that in encysted dropsies, unless the containing sac can be entirely removed from the body, or destroyed by suppuration, there is very little ground to hope that they ever can be cured by art. Therefore, when the ovarium is the seat of the disease, we are warranted by the successful results of the few operations of the kind that have been performed, in laying open the cavity of the abdomen and removing the diseased organ from it at once. If this course had been pursued towards my patient she might at this time have been living. These organs have been removed sufficiently often, without dangerous symptoms supervening, to fully justify the operation in all cases where the general health of the patient is good and the diagnosis clear. The appalling exposure of the viscera in this operation, should, I admit, deter from its performance, were death not inevitable ninety-nine times in a hundred without it." "Unfortunately the dread of attempting to do good for fear that evil may grow out of it, paralyzes the hands of surgeons, and satisfies them to sanction inevitable death, rather than incur the possible dan-

gers of a timely operation. The time, however, has come when these degrading apprehensions are giving way," etc.—(p. 361.)

I could not express my views on this interesting subject more clearly than Dr. Foreman has expressed them for me in the above quotation, and I beg you to receive the same as my answer to the important question, in regard to the propriety of the operation of ovariotomy, that you propounded to me. Those who are disposed to blame the New York physicians for letting the sneers of London editors paralyze their hands, so far as to sanction the inevitable death of Mrs. Hunt, rather than give her a chance for her life by resorting to ovariotomy in her case, should not hold the physicians of the present day blameless, who condemn the operation under all circumstances, for no better reason than that some flippant European writers and lecturers have condemned it without making themselves acquainted with the facts contributed by American surgeons.

It is one thing to cast doubt and suspicion upon facts, and another to ignore them altogether. .

Fifteen or twenty years after ovariotomy had been successfully performed in a number of cases in Kentucky and other parts of the United States, doubt and suspicion were cast upon them by European writers, and now after the facts called in question have been proved beyond cavil or dispute, they are very much inclined to ignore them entirely, and to treat the subject as if no such operation had ever been successfully performed in America. Thus Watson, in his fourth lecture, speaking of ovariotomy, says: "The results of experience have been so discouraging, as well nigh, in most minds, to prohibit such attempts in future." Watson had evidently not informed himself in regard to the facts, or designedly ignored Dr. McDowell's and other American surgeon's successful operations. It does not follow that because the operation has been unsuccessful among the pauper and lazaroni classes in the European hospitals, that well fed Americans, surrounded with all the comforts of life, and who stand operations much better than European hospital patients, should be deprived of the chance it gives them for their lives. Both in surgery and in the practice of medicine, it is high time for America to set up for herself, and to be governed by her own experience and observa-

tion, and not by the experience and observation of Europe, drawn mostly from hospital practice. It is true that the operation of ovariotomy would be apt to kill a half starved pauper in a crowded European hospital, and so would a hasty plate of soup, a full meal, a dose of calomel and jalap, or a free bloodletting.

In the Boston Medical Journal, vol. v, p. 378, 380, Dr. Thos. Fereday, of Dodley, reported a case of ovarian tumor, spontaneously subsiding by a discharge of fluid from the vagina, estimated at from two to three gallons, in one night. In this instance, the water no doubt, made its way through the Fallopian tube into the uterus, and passed out of that organ through the vagina.

A similar case is reported in the Transylvania Journal of 1829, vol. ii, pages 97, 98. The patient had taken a dose of senna, and reported to the attending physician that it had not only operated on the bowels, but that she "had urinated during the night to an amount that not only astonished but alarmed her." The next morning the ovarian tumor, a very large one, had entirely disappeared. It had evidently broken into the uterus, through the Fallopian tube, and passing out *per vias naturales*, was mistaken for urine. The Fallopian canal, when enlarged by hydroma or other causes, affords an open way to the cavities of the serous membranes, through which, fluids, extravasated in the abdomen, may find their way out. It would also give a ready outlet to the water contained in ovarian cysts. Cysts are lined with a distinct secreting membrane, sometimes single, but generally composed of smaller cysts contained within a parent, attached by narrow pedicles and communicating between themselves. When cysts are opened from without, no matter how small they may be, a dangerous inflammation is sure to follow, which nothing can cure but an entire destruction of the secreting surface by suppuration or by total excision.

Hence no cases of ovarian dropsy, which have been treated by puncture from without, have recovered, so far as my observation extends. I have seen the operation tried under the most favorable circumstances, and always without success.

No inflammation followed in the case in which I drew off a large quantity of gelatinous fluid by probing the Fallopian

tube. The woman entirely recovered, and has since had a number of children.

The other two cases above mentioned, where the ovarian tumor spontaneously disappeared in one night under the excessive discharge of water from the natural passages, also entirely recovered. This new operation of reaching the cyst through the Fallopian ducts, is decidedly preferable to any other in cases which will admit of the fluid being reached in that manner. The operation is neither difficult nor painful, where the tube is sufficiently open to admit a small sized probe.

In a lady who was subject to a profuse discharge occasionally from the vagina, supposed to be leucorrhœa, I have several times passed a small sized catheter into the Fallopian tube. After gaining the cavity of the uterus, the catheter was passed very readily and without pain to so great a distance as to demonstrate, beyond a doubt, that it was far up in the Fallopian tube. It was only during the period of those aqueous discharges that I succeeded in passing it with facility to a distance that proved it to have passed beyond the cavity of the uterus. I am aware that ovarian tumors, besides the aqueous, semi-gelatinous, meliceritous, and atheromatous matter, contain, in many instances, hair, teeth, fleshy substances, and bones. Evacuating the liquid contents through the Fallopian tubes, it is very probable would cause the more solid, scirrhous, or sarcomatous materials to liquify, and to escape in the same way. In the case that I reported, a mass of hard matter, as large as the fist, could be felt in the ovarian region, which contiuued for a year or more before it finally disappeared. When I first operated she was fully as large as a pregnant woman at her full time.

Ovarian pathology mocks at all the learning of the schools. Who can account for a *dens sapientia* in the ovarium? Yet Dr. Archer, of Maryland, found a tooth of that character in the ovarium of a patient of his. See Medical Repository, vol. xii, p. 365. New York. 1859.

A great many other cases are recorded in various works on good authority, not only of hair, bones, and teeth being found in the ovaria, but, in some instances, of teeth set in on alveolar process, and in one case of bones in the ovarium of a child ten years old.

Too litttle attention is paid to facts derived from American fields of experience, and too much importance is attached to the dogmas and opinions of book-makers and teachers in the large cities of Europe. They are mostly opposed to ovariotomy, because of the ill success which has attended it in Europe, and are slow to believe that inexperienced country—physicians, in the backwoods of America have been more successful than their most experienced and dexterous surgeons of their large hospitals. The error lies in their not taking into consideration the vast difference between the unfortunate people of Europe, living in an abnormal condition, scarcely one in a thousand occupying the position in society that nature intended him or her to fill—the sickly, infirm, and half-famished masses being compelled to overtask themselves to pamper to the luxuries of a few, whom luxury is enervating; and the more fortunate American people, living in a normal condition, all classes of society, men, women, and children, and negroes, occupying the position that nature intended for them, each having as much liberty as comports with the happiness, morality, prosperity, and comfort of the whole. Until due allowance is made for the difference of circumstances between the people of despotic Europe and those of the model Republic of the New World, the writers and teachers in London and Paris will find difficulty in believing that a physician in the little town of Augusta, in far distant Kentucky, has been engaged in seven successive operations for ovarian dropsy, all proving successful, when their most successful surgeons have failed in five cases out of seven.

Many good meaning men, who have tried to probe the Fallopian tubes, both in the dead subject and the living, without success, would sooner believe that I had made a mistake and got no farther than the cavity of the uterus, than concede that a surgical operation had been performed, which Prof. Jackson and others of less note have regarded as impracticable, forgetting that the practicability or impracticability of the operation depends upon the circumstances of the case and not upon any remarkable skill of the operator—forgetting also that disease can work such changes in the Fallopian tubes as to give sufficient capacity to admit the hand, much less a probe. When the medical men of Europe take a lesson in politics and learn

the important truth, what a normal government, by diffusing the blessings and comforts of life among all classes of society, can do in enabling the citizens thereof to bear surgical operations, that nine out of ten of the half-starved, overworked subjects of abnormal governments would die under, they will be prepared to give due weight to the facts that American operators have contributed to surgery, and not before.

Respectfully your obedient servant,

SAML. A. CARTWRIGHT, M.D.

DR. J. TAYLOR BRADFORD, *Augusta, Ky.*

I have other letters of much interest in favor of the operation, the authors of which are unwilling that they should go to the Society in their present shape. They are mostly, however, confirmatory of the propriety of the operation, not statistical.

It is a singular fact, that in this country the operation of ovariotomy belongs almost exclusively to "Young America." So, too, in England and in France, few of the elder surgeons are found operating, but rather seem to have reversed that lucky maxim which Dean Swift practiced and taught, "That because he had spent a part of his life in leaving undone the things which he might have done, he would not throw away the remainder in despair."

No one thing, perhaps, has done more to prejudice the older surgeons against the operation than the blunders and errors of Mr. Lizars. And where errors and injudicious operations are committed by great men, we are too apt to regard the thing as in itself hopeless under the same or similar circumstances. Is it not a fact, then, with the diminishing fatality of the operation, that many, very many, of the elder surgeons, without due investigation and reflection that the *ovary* is neither essential to the life or health of the patient, declined to operate or countenance the legitimacy of the operation, because men equally or more renowned than they had failed—not, perhaps, from the manner in which the operation was performed, but from the undeveloped means of a proper diagnosis.

No one skilled in the selection of cases would have taken more than one out of the four cases operated on by Mr. Lizars; and their failure because of his high position for a time, rendered the operation palsied in all Europe.

You will observe in the letter of our distinguished countryman, Prof. Mott, of New York, addressed to me in 1854 (and I hope it will not be considered uncourteous in alluding to it by way of illustration), that his prejudice to the operation is the result of the loss of two cases of his own, and of four which came under his observation. "In no one of these cases," says he, "was the tumor over fifteen pounds," whilst in his own cases one weighed six pounds, and the other ten.

Now let us examine for a moment these cases. It is a well settled principle, that rarely, if ever, in the early stages of ovarian tumor, is the constitution or the general health much disturbed. Why operate, then, where the tumor had only attained to six or ten pounds? The danger is greater, whilst the necessity of the operation is less.

My reading and study of the cases of the most successful operators, as well as my own experience, have taught me that there are two extremes in the time at which we should operate, both of which should be avoided. The one is where the tumor is small; the other, where the operation has been delayed so long that the size of the tumor and the decline of the general health render it hazardous to operate. In the first place I hold that in proportion to the increased size of the tumor (all other things being equal) will its pressure upon the adipose substance about the parietes of the abdomen produce its absorption, and the friction of the tumor against the peritoneum accustom it to that usage which renders it less sensitive, and less liable to take on inflammation.

The same principle holds good in pregnancy—in the earlier stages of it, before the womb has filled the abdomen, abortion, miscarriage, or premature labor (accidental or superinduced) is known to be more dangerous than at the full period of utero gestation.

I have now been engaged, directly or indirectly, in nine operations, all but one of which have been successful, and yet the smallest tumor weighed twenty-four pounds, the largest sixty. There is, then, in this operation, as in most other things, a "happy medium," which, if arrived at, will insure the greatest degree of success.

I might cite an instance in the West similar to that of Prof. Mott, where the failure and errors of leading surgeons hovers

yet, like an incubus, over the operation, but it might seem like the child reproving the parent from whom he had received valued lessons too sacred to be cancelled.

There are other operations which have been much more fatal than ovariotomy, yet they are regarded as legitimate.

When the ligature was tied around the innominata the ninth time, with a fatal effect in every case, Dupuytren attempted it the tenth time with the same result. And after it had been performed the thirteenth time, all ending in death, the celebrated surgeon, Mr. Liston, whose dictum characterized ovariotomy as "belly ripping," attempted the ligature of the *arteria innominata* with the same fatal result. And yet the same surgeon, with many others, legalize this operation up to the sixteenth failure, without one case of success. Yet ovariotomy, with her increasing triumphs, is condemned!

In Mr. Merriman's list of twenty-three cases of Caesarian operations (London Lancet, vol. i, 1851, p. 319) comprising all the operations in the British Islands, from 1738 to 1820, in but one case did the mother survive the operation, and we find among the operators the names of John Hunter and John Bell.

Mr. Radford, in a subsequent report, says: "But two out of fifty cases of Caesarian operation, which occurred in Great Britain and Ireland, have recovered from the operation." And what is strange, one of these two, the first case ever operated on successfully to the mother, was operated on with a razor by an Irish midwife, Mary Donnelly.

Mr. Solly says that deaths from ovariotomy up to 1846 were only one in 3½. Dr. Atlee makes the mortality only 26½ per cent.; Dr. Robert Lee, over 37 per cent.; Mr. Phillips, over 39 per cent.; Dr. Cormack, over 38 per cent.; Dr. Ashwall's table, over 36 per cent.; Dr. Lyman, in his table, says three-fifths of the operations are unsuccessful. Mr. Churchill says, "undoubtedly the mortality is very great, but a mortality nearly, if not quite as great, is not considered a fatal objection to other operations." "If," says he, "we take the major amputations of the limbs (primary and secondary), it appears that in Paris, according to Malgagne, the mortality is upwards of one in two; in Glasgow, it is one in 2½; in the British hospitals it is one in 3½." As to amputation of the thigh, Mr. Syme observes, "the stern evidence of hospital statistics shows that the aver-

age frequency of deaths is not less than from sixty to seventy per cent.; of 987 cases collected by Mr. Phillips, 435 proved fatal, or 44 per cent.

Mr. Curling states, on referring to a table of amputations performed in the hospitals of London from 1837 to 1843, "I find 134 cases of amputation of the thigh and leg, of which 55 were fatal, giving a mortality of 41 per cent." Of 201 amputations of the thigh, performed in Parisian hospitals, and reported by Malgagna, 126 ended fatally. In the Edinburg hospital 21 died out of 53. Even if we take much larger numbers we find the mortality very high. Dr. Inman has collected 3586 cases of amputation generally (primary and secondary) from accident or disease, and the deaths are one in 3 1-10. In 4937 cases published by Mr. Tennick, the mortality is one in 3 1-15.

The result of the amputation at the hip-joint is still more unfavorable. Mr. James Cox has shown that, out of 84 cases, 26 were successful, and 58 unsuccessful.

Again: take operations for hernia, Sir A. Cooper records 36 deaths in 77 operations, and Dr. Inman 260 in 545.

Or, the ligature of large arteries, of which Mr. Phillips has collected 171 cases, of which 57 died; Dr. Inman 199 cases, of which 66 died. Of 40 cases of ligature of the subclavian artery, 18 proved fatal; the ligature of the innominata has been fatal in every case.

So that, taking the mortality of Dr. Lee's estimate, it is not higher in ovariotomy than in that of other operations, which are admitted to be justifiable notwithstanding.

I might, with equal propriety, refer you to the comparative statistics of Prof. Simpson, Dr. Atlee, and Dr. Buchanan, together with many others, but I trust the present are sufficient to convince you that the operation is not such a monstrous innovation on the dignity and legitimacy of surgical practice as some are wont to teach.

OPERATIONS IN KENTUCKY.

The following is, I believe, a complete collection of all the cases which have been operated on in Kentucky up to the present date. Some of them, you will see, are without any detail, notwithstanding I have addressed circulars, as well as private letters, to the operators. Those of them contained in

Dr. Lyman's report, I shall, for the sake of convenience, copy as condensed by him, the object being merely to give the leading characteristics of each particular case:

1. Buckner.—Mrs. W.—Two solid tumors felt through the abdominal parietes; the upper very moveable; the other wedged in the pelvis, and felt through rectum and vagina; operation June, 1848; incision from umbilicus to within an inch of symphisis; pedicle of the upper tumor attached to the lower, ligated, and removed; pedicle of lower tumor originating in left Fallopian tube; ligature around the diseased left ovary; pedicle of tumor ligated in four equal parts; no adhesions; died sixth day of peritonitis.

2. Buckner.—Age thirty-nine; several children; operation January 31st, 1850; incision eight inches; numerous adhesions, ligature around the pedicle; tumor of right ovary removed; ligature felt thirty-ninth day; alarming symptoms, but the patient eventually recovered.

3. Blackman.—Tapped several times; operation December 22d, 1855; adhesions slight; ovarian tumor of twenty-two pounds removed; no bad symptoms after; recovered.

4. Bush.—Not published; no report; died.

5. Bayless.—Mrs. Dredden, age 31; operation September, 1849; disease of seven years standing; tapped seventeen times; incision ten inches; numerous adhesions, particularly around the tapping point. There was no distinct pedicle on either side to guide the application of a ligature. It was all a confused mass. Tumor multilocular; weight eighteen pounds besides the tappings; ligature fell at the end of the eleventh month; recovered.

6. Bradford, J. J.—Not published; no report; died.

7. Bradford, J. Taylor.—Miss H., Mayslick, Ky., single, age 21; twelve years growth, having commenced at nine years of age, after scarlatina; menses appeared at twelve and continued regular; variety of treatment; health failing; operation June 14th, 1853; incision eighteen to twenty inches, between ensiform and pubis; adhesions to omentum, cyst tapped, extracted, and double ligatures passed through the pedicle left ovary; forty-one pounds, containing, attached to inner wall, bony plate, varying in size from a pin's head to a saucer, with one large piece of bone embedded in the wall of the sac; up the sixteenth day; ligature fell sixth week; recovered.

8. Bradford, J. Taylor.—Miss M., Milford, Ky., age 20; menses regular; thirteen months standing; progress rapid; never tapped; operation June 4th, 1856; incision ten inches; tumor very vascular; cyst originated on broad ligament half inch from left ovary; ovary healthy and of normal size; ovary removed with cyst; no adhesions, tumor weighed twenty-four pounds; double ligature passed through pedicle; ligature fell fourth week; recovered.

9. Craig.—Mrs. H., age 26; one child; menses at 15; at 16 had suppression from cold, and never regular after; complicated with ascites, which disappeared several times under treatment; operation April 22, 1854; tentative incision three inches, extended to scrobiculus; adhesions previously diagnosticated; tapped cyst; found contents too thick to pass through canula; adhesions to omentum and mesentery; double ligature through pedicle; left ovary; recovered in seven weeks; solid parts eleven and three-quarter pounds.

10. Dunlap.—Mrs. B., age 37; five children; one year's growth; tapped four times in last six months; operation March 24, 1853; incision from umbilicus to pubis, twelve inches; adhesions slight; cyst evacuated; solid portion size of child's head; evacuated; double ligature to pedicle; thirteenth day walked across room; ligature fell in three weeks; left ovary; thirty-seven pounds; recovered.

11. Prof. B. Dudley.—Not published; no report; died.

12. Dudley, E. L.—Not published; no report; died.

13. Dudley, E. L.—Not published; no report from operator; operation abandoned; patient recovered.

N. B. Received report from Dr. Dudley, April 7, too late for report.

14. Evans, A.—Not published, no report from operator; patient died.

15. Evans, A.—Not published; no report; recovered.

16. Gross.—Miss D., age 22; menses regular; eighteen month's growth; tapped three gallons three weeks before; operation June 19, 1849; incision three inches above umbilicus to pubis, one foot; right ovary; adherent, red, and vascular; ligature around the pedicle, which was narrow, and though tied with "great firmness," it came off after removal of the tumor; a large artery was secured, and another ligature applied around the pedicle, and one of the divided bands of adhesions, which showed a disposition to bleed, was ligatured also. The menses appeared for two days, the thirteenth day, and though the case looked promising, she died in four weeks of peritonitis: encysted tumor, nine pounds.

17. Miller.—Age 37; four month's growth; tapped previous week; operation April 6, 1848; incision, umbilicus to pubis; adhesions; two of the cysts tapped to reduce the size; tumor drawn out, and single ligature passed through pedicle: tumor removed, and remaining vessels of broad ligament secured separately: weight nine pounds and a quarter: last ligature came away thirty-first day: recovered.

18. McMillen.—Not published: no report: died.

N. B. Promised report, but did not receive it.

19. McDowell.—Mrs. Crawford; operation December, 1809: incision on left side, three inches from and parallel to rectus; nine inches long: ligature around pedicle: tumor opened, and fifteen pounds of gelatinous substance removed: pedicle divided and sac extirpated: whole weight twenty-two pounds and a half: in five days, the report says, she was able to make her own bed, and in twenty-five days she went home.

20. McDowell.—Negress: after three or four years of mercurial treatment incision was made as in previous case: adhesions to bladder and uterus preventing its removal: the tumor was incised and gelatinous matter and a quart of blood escaped: recovered from the operation: in two years the tumor was as large as ever.

21. McDowell.—Incision in linea alba, an inch below umbilicus to within an inch of pubis: ligature around pedicle: incision extended two inches above umbilicus, and a "scirrhous ovarium," weighing six pounds removed. She was well in two weeks, with exception of the ligature, which fell in five: recovered.

22. McDowell.—April 1, 1837: incision as in last case: ligature slipped, followed by profuse hemorrhage: vessels tied separately: some of them were cut through by the ligature: finally passed a ligature around the pedicle again, and stitched it down: recovered from the operation, but was not in good health afterwards.

23. McDowell.—Operation May 11, 1829: had been under the treatment of others for eighteen months, with supposed ascites: treatment continued a while: she was then tapped, and thirteen quarts of gelatinous fluid removed: in two months tapped again, and then discovered the tumor: in a few months was tapped the third time, when the incision was enlarged sufficiently to introduce a finger to settle the diagnosis: tapped a fourth time, shortly before the operation: length of incision not mentioned: tied the pedicle, also a band of uterine adhesions, and removed the tumor: left ovary: died in three days of peritonitis.

24. McDowell—Fifty-five years of age: operation 1822: incision six inches in linea alba: bloody serum gushed out and continued to flow until the sac was emptied: edges of the wound approximated by interrupted sutures: the adhesions to the peritoneum being of such a character as to induce an abandonment of the operation;

wound healed at the end of five weeks: patient lived 20 years after the operation: enjoyed good health. President Jackson was present at this operation, and the details were furnished Dr. Gross by Dr. James Overton, who was present at the operation.

25. McDowell.—Miss Plasters: operation May 12, 1823: incision whole length of linea alba: finding the tumor so large that it could not be removed entire, the sac was punctured. The morbid mass was then lifted from its bed, a ligature having been previously cast around its footstalk, or uterine attachment: the edges of the wound were carefully closed in the usual manner, and the woman put to bed: for fifteen days after the operation there was a bloody, putrid discharge from the wounds, supposed by Dr. McDowell to be sloughing of the omentum. Patient entirely recovered. Dr. Gross is indebted to Dr. W. C. Galt for many years a distinguished practitioner of Louisville, for the details of this case.

26. Smith, A. G.—Age 30: two children: menses regular: operation May 24th, 1823: incision, umbilicus to within an inch of pubis: no adhesions: sac emptied of several pints of "watery matter," and with some difficulty extracted: ligature around the pedicle: right ovary of "scirrhus appearance:" menses returned profusely in five days: ligature fell twenty-fifth day: has been well since except for pain in loins and abdomen during menstrual periods.

28. Smith.—Case successful. (Cooper's Surg. Dic.)

29. Smith.—Patient died of secondary hemorrhage from relaxation of the ligature some days after the operation. (Cooper's Surg. Dic.)

30. Smith and McDowell.—Patient had ascites, for which she had tapped herself ninety times. Both considered the diagnosis as certain, but, on opening the abdomen, no ovarian tumor was found: a mass of intestines only, conglomerated by adhesions. She died.

ANALYSIS OF KENTUCKY CASES.

It will be observed in the detail of the Kentucky cases, that many of them are incomplete in prominent points of statistical interest. In the eight cases of Dr. McDowell, five of which were published by himself, in but one is it stated whether the right or left ovary was the seat of disease, whether any were fibrous, etc.

Others again have failed to give the duration of the disease, whether married or single, whether they had borne children or not, age, etc.

In consequence of this omission on the part of those who have reported the cases, and the failure of others to report the unpublished cases as solicited by me, it will be impossible for me to give you any thing like a complete analysis of them. I have stated the result of some of the unpublished cases on reliable authority, and if, in any instance, it is incorrect, it will be no less a regret to me than the operator. I will note some of the leading points of interest so far as I have been able to get them.

Out of thirty operations performed in Kentucky, nineteen recovered and eleven died, nearly two-thirds being successful.

Of the thirty operations for the removal of the tumor, it was completed in twenty-five; in five it was not completed.

Of the five cases in which the tumor was not removed, two recovered and three died.

In the five cases where the operation was abandoned, the cause of the failure is reported in but two, one from adhesions to the bladder and uterus, and one from peritoneal adhesions.

In one case (No. 30) no tumor was found: "a mass of intestines conglomerated by adhesions," accompanied by ascites.

In one case (No. 30) the patient tapped herself ninety times.

In but four cases is the cause of death given; three were from peritonitis, and one from hemorrhage.

In twelve cases, so far as stated, there were adhesions, or one in every $2\frac{1}{2}$.

In but two cases was the short incision practiced.

In one case (No. 8) the cyst formed on the broad ligament, and not in the ovary, weighed twenty-four pounds.

In one case (No. 9) accompanied by ascites.

In case No. 5 the ligature did not fall until the eleventh month.

(No. 5) disease of seven years standing.

(No. 7) disease of twelve years standing.

(No. 7) disease commenced three years before the menstrual discharge occurred.

(No. 7) contained a large piece of bone embedded in the sac, with numerous particles of bony excrescence on the anterior superior part of the sac.

(No. 7) the disease commenced at nine years of age.

It seems in the three hundred cases reported by Dr. Lyman, that this case of mine (No. 83 of his table, and No. 7 of Kentucky cases) was the earliest period at which the disease commenced; and, on page 127 of his report, he alludes to it doubtingly, and says, if the "account may be relied on." I have no idea that Dr. Lyman made this allusion with any uncharitable intention, and I have no rebuke to offer, further than to reassert its correctness, and that the family physician, Dr. B. C. Duke, of Mayslick, Ky., and the mother of the young lady will bear testimony to the fact. But further: two years ago I

saw a little girl in Utopia, O., four years old, whose abdomen was wonderfully distended. She walked about, but tottered as she went. She complained but little, except from over-exertion or the influence of cold, when there would be some tenderness or soreness of the bowels. The general health was good, and in strange contrast with the enormity and extent of the disease, for I believe then the contents of the abdomen would have weighed twenty pounds. On examination of the tumor, I found it filling up every part of the abdomen, fluctuation was distinct, percussion dull at every point, except on the opposite side to which she was lying, near the spine.

I learned from the mother that one year before, she observed a swelling as large as a goose-egg in the right groin. She complained more then than since; continued to enlarge, inclining for some months to the right side, until one day, in her own language, the "swelling was all over her bowels." To me it was a clear case of ovarian tumor. I have never met with one of which I was surer. I advised tapping and intended to follow it with iodine injections, bandage of Mr. Brown, etc., but, for a time, the family postponed it. In the meantime they removed to Cincinnati, since which time, with all my curious interest in the case, I have not been able to hear one word.

In the New York Journal of Medicine, 1854, may be found a case of Mr. Cox, where a "healthy nursing infant" died of convulsions; the ovaries were found dropsical.

Mayor*—a case of a child seventeen days old, where the ovaries were dropsical.

London Lancet, vol. 2, 1845, p. 120 (report of Royal Society of London, 1805), Mr. Charles Pedro reports a case where the ovaria were found wanting. Patient died at twenty-nine years of age.

Since circumstances noticed in preface induced me to change the character and material of this report, I had intended to report the cases of Dr. Dunlap and myself in detail, but as this report has already gone beyond my calculation, and as three of our operations are noticed in the Kentucky cases, and others of ours and my own, casually alluded to by way of illustration

* Lyman.

in the chapter on diagnosis and elsewhere, it were now seemingly useless.

It might seem that these cases were picked or selected, as peculiarly adapted to the operation. This may be true to some extent. Let us examine:

In one, Miss Harrisson, No. 7, of Kentucky cases, one of Kentucky's most distinguished surgeons, a name that was "mightier" than "Elam the chief of our mite," sent this interesting young lady, in the bloom of youth, to her friends, there to "shuffle off this mortal coil" *as a hopeless case.*

After the operation she returned home from Augusta to her parents. Not long after I chanced to meet her on board a steamboat, on the Ohio river. I never shall forget that bounding step and *weeping face*, which moved my heart by the testimonies of her gratitude: and if there be anything which invites the love and ambition of the generous heart, or inspires an emotion worthy of our glorious triumphs in science, it is that of bearing "healing on our own wings," of giving "beauty for ashes, the oil of joy for mourning, and the garment of praise for the spirit of heaviness."

In another case, Mrs. Lastley, of Portsmouth, Ohio, *Dr. Kimbro*, of Lowell, Massachusetts, a surgeon of considerable notoriety, *opened the abdomen*, and finding the adhesions, as he thought, insuperable, closed up the wound and *abandoned the operation*. Dr. Dunlap and I, one year after, examined the case patiently, deliberately, and carefully, and *operated successfully*. See page —. In the one of these two cases the disease was of twelve years standing, and the tumors weighed *forty-one pounds*. In the other the tumor weighed *fifty odd pounds*, and required twelve ligatures to the adhesions.

It may save reflection here to state (that contrary to the positive agreement made by Dr. Dunlap and myself whilst in partnership), we attempted the removal of an apparently justifiable (if any are) case of *fibrous* tumor of the *uterus* in a patient in Iowa (*not ovarian tumor*) which proved unsuccessful. I did not see the patient until the morning of the operation, but through the imploring treaties of the patient and the attending physicians, as well as some recent published cases of the successful removal of the uterus, Dr. Dunlap was prevailed upon to take the case. I am as much responsible as he,

and I mention this case because the bad as well as the good cases in surgery should be known, and to steel you to adhere to your opinions if well founded, independent of those who are not so responsible.

I have but little desire to indulge in idle speculation about the propriety of the operation, facts and figures are to decide the question, and if, by a principle of arithmetic, addition, multiplication, and subtraction, we give to each fact and figure its proper bearing, the answer will come out right. The opposers of Ovariotomy argue as though the improvements in dignosis were finished, and the safest mode of operating had gained its acme. When the electric fluid was conducted from the cloud by the kite of Dr. Franklin, it did not stop there, or, but for a time, and now we find it leaping from city to city as the medium of conversation. Soon its submarine currents will relate to us the transactions in all Europe an hour ago. The great propelling power, which was first discovered escaping from the "mouth of a tea-kettle," was first applied to river steamers, now it "moves like a thing of life" over the Atlantic. And so every improvement has been gradually developed from one degree of perfection to another.

If you will examine the *statistics* since 1850, but more particularly since 1853, you will find by comparison with previous operations that the mortality has diminished, and why? Simply by the better developed state of the *diagnosis*, and the improved means of operating. The operation in itself is said by some to be a simple one. I have never viewed, or found it so, there are innumerable difficulties which sometimes arise, which not one in ten of the medical books, not even Mr. Brown in his late work on "the Surgical Diseases of Women" hints at. It will be found by the statistical tables of Dr. Atlee and Dr. Lyman, that about twenty-five per cent. die from hemorrhage. How many writers or operators can you summon, who regard the *condition* of the *pedicle when the ligature is applied as a matter of any consideration*, whether it should be upon the stretch, or how? I have met with but one in my reading, Mr. Solly, and none in my intercourse who at first sight so regarded it. The pedicle, but more particularly the *ligament* of the *ovary* is very *extensible* and *elastic*. If the tumor be lifted out with much force, or by any movement which

places the pedicle on the stretch, so much so, that it does not contract before the ligature is applied, that part of it which is most extensible when it does contract, is apt to slip through the ligature, and still without close examination look as though all was right. Once on turning the stump of a pedicle up to see if it was bleeding, I saw a part of the pedicle contracting within the ligature. I reflected much about this circumstance, and not until I read Mr. Solly's case did I fully understand it. (London Lancet, vol. 1846, p. 442.) Many cases I have no doubt died from this cause. Prof. G. W. Bayless' Missouri case, Mr. Brown's, and many others, struck me as losing their lives from this cause. I hoped to speak of some of the leading features of the operation, it is now out of my power.

In conclusion, I have to say to the Medical Association, that it will be recollected by some of its members that most of my leisure time for two entire years was devoted to the collection and classification of statistics on Ovariotomy. But a few weeks before the meeting of the Convention, Dr. Lyman, of Boston, published a circular report embracing about the same number of cases, and as his cases and mine were gathered from the same sources, I was driven to the necessity in the very short time, to write the present report, or fail to make one.

This is all the apology I have to make for the report as you find it, trusting that your "generosity will forgive what your good sense may see amiss."

Pharmaceutical Department.

By T. E. JENKINS, Pharmaceutist.

THERAPEUTICAL ACTION OF DULCAMARA AND SOLANINE.

Prof. Caylus, of Leipzig, has undertaken a series of experiments to ascertain the exact effects of Dulcamara, and its active principle Solanine. These substances belong to the class of narcotic acrids, as they produce a paralyzing action on the medulla oblongata, and an exciting action on the nerves.

They cause death by producing paralysis of the respiratory muscular apparatus, by an action analagous to that of coneine and nicotine. They possess a therapeutical action in spasms, and in irritable conditions of the respiratory organs, in simple spasmodic cough, hooping cough, and spasmodic asthma. Their therapeutical action in certain morbid conditions of the blood, as gout, rheumatism, constitutional syphilis, and perhaps in certain chronic conditions of the skin, may be owing to their augmenting the excretion by the kidneys, of the constituent parts of the blood which have undergone combustion, and not to the excitement of cutaneous activity.

Solanine and Dulcamara may be given without danger in inflammatory conditions of the stomach and intestinal tube, as they exercise no action on those organs.

Inflammation of the respiratory organs presents no contra-indication of their employment, but they are contra-indicated in inflammation of the kidneys.

The medium dose of Acetate of Solanine, which M. Caylus prefers to the Solanine itself, on account of its greater solubility, is from about one-eighth to about five-eighths of a grain. The best form for administration is in pill, because solutions of it have a very disagreeable taste. The Alcoholic extract is much better than that made by the agency of water.—*Presse Medicale Belge.*

Revulsive Treatment of Chronic Affections of the Eye.—Mr. Travignot, who regards it as a valuable adjuvant, employs two kinds simultaneously.

1. A *cutaneous* revulsive, of which the following is the formula:

℞—Resin,

Yellow Wax, aa. - - -	100 parts.
Turpentine, - - - -	50 "
Euphorbium, powd., - - -	25 "
Cantharides, - - - -	15 "
Croton Oil, - - - -	5 "

Melt by the aid of a gentle heat, the Resin, Wax, and Turpentine; add the Croton Oil and sprinkle in the powders with constant stirring; continue the heat, which should not exceed

212° for half an hour, with occasional stirring, and finally remove the heat and stir until cold.

This is less painful than antimonial revulsives, and may be applied to the nape if both eyes are affected, and behind the ear if only one, for two or three weeks, without inducing excessive irritation.

2. The *mucous* revulsive is formed of—

℞—Powd. Orris,	- - -	25 parts.
Calomel,	- - - - -	4 "
Camphor, *in fine powder*,	- -	2 "

Mix.

This is used as snuff five or six times a day, after blowing the nose.

It excites the pituitary membrane very advantageously in nervous affections of the eyes.—*Moniteur des Hop.*

Powder for Nocturnal Incontinence of Urine in Children:—

℞ Carb Iron,	- - - -	25 parts.
Ext. Belladonna,	- - - -	5 "
Nux Vomica, powd.,	- - -	4 "

Mix well and divide into ten powders, of which one should be given daily. This treatment it is said will effect a cure in eight or ten days.

Case of Oedematous Laryngitis. By Archie B. Cook, M.D., *Demonstrator of Anatomy, University of Louisville.*

I was requested Saturday, March 12, 1859, by Dr. J. E. Crowe, to visit Mrs. R., aged about thirty-five. She was robust, plethoric, and had enjoyed good health until the 9th inst., when she observed some pain about the region of the larynx and difficult respiration. I was informed she had fever accompanied by the usual symptoms, but these did not become urgent until Friday night. I saw her at 9 o'clock, A. M., Saturday. Her respiration was hurried and stridulous, voice extinct; articulation an undistinguishable whisper; countenance anxious; eyes injected; face flushed; lips livid; pulse 109, full and compressible; skin dry; the neck beneath the inferior maxilla much tumefied, the tumefaction extending to

the superior margin of the sternum; pain and tenderness in pressing over the larynx, increased by lateral pressure. The tongue was thickly coated and of a metallic lustre, the papillæ enlarged, of a bright red color and projecting through the coating; the fauces were highly inflamed; the epiglottis stood erect, was of a bright red color and œdematous; on either side the laryngeal sacs (or pouches) projected over the rima-glottidis, and were tense from sub-mucous effusion.

I at once depressed the tongue, and with a long bladed gum lancet freely scarified the laryngeal sacs; the index finger of the left hand was then passed behind the epiglottis, guiding the lancet along the finger, this structure was also scarified. The flow of blood and serum materially relieved the respiration. The bleeding having ceased, a solution of nitrate of silver, forty grains to one ounce distilled water, was applied by means of a probang to the fauces and larynx, after which the patient was ordered to inhale warm vapor, to keep hot fomentations assiduously applied over the neck, and to take every third hour a mixture containing two drachms spiritus mindereri, and ¼ grain Tart. Ant. et Pot. In the evening the Argentine solution was again applied, and the treatment continued, the tartar being reduced to ⅛ grain per dose.

March 13th, respiration less laborious, but little of the stridulous breathing this morning, still great tenderness about the region of the larynx. The Argentine solution again applied and treatment continued. At one o'clock to-day the respiration again became labored and difficult. I again depressed the tongue and observed an increase of the oedema in the epiglottis and left laryngeal sac, both of which were again freely scarified and followed by almost instant relief to the respiratory function. The fauces and larynx were probanged, and other treatment continued with the addition of wine every four hours.

March 14th, the patient is more comfortable in every respect. The Argentine treatment applied twice to-day and other treatment continued.

March 15th. To-day the respiration is easy and eighteen per minute, she feels debilitated and exhausted, and restless during the night. Omitted the application of the Argentine solution, suspended the antimonial mixture, and ordered a laxative dose

of Citrate of Magnesia, wine, nourishing diet and Ammon. Carb. grains v, Pulv. Dover, grains iii, every third hour.

March 16th, the patient rested well the after part of the night, feels comfortable this morning, pulse 78, tongue moist and cleaning, thirst moderate, but little soreness about the larynx, no tumefaction, voice stronger, articulation distinct, relishes food. She was ordered wine and animal soups. On the 19th she had an attack of intermittent fever which readily yielded to the ordinary remedies. She was discharged cured on the 21st.

This case is given in illustration of the value of local treatment in laryngeal inflammation, *free scarification*, and Nitrate of Silver being the sheet anchors.

PROCEEDINGS OF THE COLLEGE OF PHYSICIANS AND SURGEONS.

August 16.

Discussion upon Cholera Infantum.—By request, Dr. Powell opened the discussion by remarking that he had no novel views either as to the treatment or pathology of the disease. An experience of twenty-five years had furnished him an opportunity of observing and treating a large number of these cases, and he was compelled to remark that our knowledge of the disease had advanced but little during this time. If the mortality of those attacked is less now than formerly, it is probably due to the fact that the patient's surroundings are improved. Our attention to hygienic requirements in this disease is certainly more marked now than formerly. Regarding the influences of imperfect drainage, malaria, elevated temperature, imperfect ventillation, or humid atmosphere as predisposing causes, we might expect to find this an endemic of large cities, and especially disastrous to the children of the poorer inhabitants of crowded streets and alleys. The irritation of teething and of unwholesome diet, added to the causes alluded to above, is sufficient to develop the disease sometimes with an intensity scarcely exceeded by Asiatic cholera. Indeed the postmortem appearances in these rapidly fatal attacks are analogous to those of Cholera Asphyxia, we have the same blanched appearance of the mucous lining of the alimentary tube, and congested state of the liver. Dr. Powell thought too much reliance was ordinarily placed upon the effects of medicine in this disease, to the exclusion of a proper regard to

influence of locality; more could be done by removing the child from the operation of predisposing causes. His first advice is to convey the child to a high, dry and healthy country place. This change of locality, with proper regard to diet and daily use of tepid bath, will nearly always cure the disease. As to medication, he knows nothing better than small doses of calomel, say one-sixth of a grain with prepared chalk, or minute portions of acetate lead; is little inclined to the use of opium. The fears of parents should not induce us to attempt too hasty an arrest of the bowels, coma is sometimes produced by sudden restraint of the evacuations with opium. Of course cases occur in which the use of opium is indispensable, but in chronic cases it is better to rely upon the various astringents, Kino, Geranium, Tannin, &c. Is satisfied that we should never advise the use of opium by enema in any larger doses than by mouth, notwithstanding the inculcations of authors to use three times the quantity to produce a given effect as by mouth; whatever medication we employ, we should always attend to the state of the gums and lance them when necessary.

Dr. N. B. Anderson thinks pressure upon the nerves by the approaching tooth a powerful exciting cause, and advises free division of the gums. He always finds intestinal acidity connected with these cases, and gives lime water in milk and ice, sometimes lime water, mint and camphor water in combination. This treatment, with fomentations of whisky and cloves, he finds greatly successful.

Dr. Wible. I think that recently promulgated physiological ideas have thrown much light upon the nature of Cholera Infantum. Without entering upon a discussion of these views, it will suffice to state that whatever will *excite* may produce Cholera Infantum. The excitation of teething, of heat, the conditions of the intestinal tube more often present during the languid digestion of hot weather, or emotional influences, may all produce the disease Alarm is known to deprave digestion. A child suffering under dentition is readily alarmed, even the anxious look of its mother may aggravate an attack. Physicians are not strict enough in isolating their patients so as to free them from all disturbing or all exciting causes. Keep them in cool, quiet, darkened rooms. So far as medication is concerned it is important to clear the intestinal tract of impurites, then to allay nervous excitability. The former I achieve by rhubarb and alkalies, the latter effect I seek to obtain by influence of alkalies and hyoscyamus. I formerly thought that opiates were injurious, but am not now of that belief. We must sometimes give speedy check to the exhausting diarrhœa, and opium is then indispensable. I have especially been assured of the good effects of hyoscyamus.

Dr. Powell. The remarks of Dr. Wible still further convince me that the disease is not better understood than it was many years ago. The influence of the nervous system was then appreciated. We must bear in mind when speaking of the greater success attending our treatment, that the disease is not so severe as formerly, because of our better attention to hygienic laws. I am satisfied our best course is to advise that the child be removed to the country and bathed and nourished freely. I often change from a milk diet to animal broths, wine, whisky, brandy, and sometimes quinine.

Dr. Thomson. I think we should pay particular attention to the diet of the child, patients eat fat meat with avidity. Let them suck a piece of boiled fat middling. I concur with Dr. Powell in his views of treatment.

Dr. Wible. Veal broth is a favorite article of diet with me in this disease. Children are fond of gelatine, and gelatinous materials are frequently retained when starchy ones would be rejected, hence I do not use arrow root and such like.

In reference to Dr. Powell's remarks, it is true that before we knew the researches of Bernard and cotemporaneous physiologists, the influence of the nervous system and of extreme heat, were acknowledged, but the physiology of their operation was not understood. Notwithstanding the influence of heat in the production or development of the disease, and the hot and inflamed condition of the skin, you make irritating applications, as cataplasms, &c. Why? Where is the philosophy of such treatment? The secretory structures are already too active. Why give calomel? Experience and pathology both reject it. It was given as long as the discharges were abnormal, and if children were now treated by calomel, the disease would be as fatal as it ever was, our improved hygienic condition to the contrary notwithstanding. I believe that we will learn more from the study of the nervous system than from pathology; pathological anatomy is very much of a humbug, its importance has been overrated. Study the sparks which are to set fire to the building and put them out. Don't wait to see the results of the conflagration.

Dr. Caldwell. I am glad to find that Dr. Wible is getting off from some of his notions, and that he now finds opium is not as bad as he thought it was. I concur with Dr. Powell in his views of treatment, and also in the conclusion that we know very little about the disease in its pathological aspect. No doubt heat, moisture and irritability of the nervous system have much to do in its production. I believe it to be especially based upon a disturbance of the nervous and secretory systems. To restore the former I rely greatly upon opium; assafœtida, hyoscyamus, &c., may do very well when there is not

much the matter, but when there is I do not depend upon their action. My reliance is on opium. The disease, however, presents great varieties, and we must meet these as they appear. In many cases we find great restlessness, the child tossing about from side to side, his head hot and his feet cold. In such cases I apply cold water to the head, place his feet in a hot mustard bath, and order a spice plaster over the stomach. I administer opium and calomel, and if the head be not too hot, quinine. As regards the secretions, they are not only not too active, but suspended. We have plenty of serum from the blood, but you can hardly stimulate the secretory organs to action. I do not allow my patients to drink water, but to allay thirst give them a little ice. We may, however, pursue this treatment and see the child improve and imagine that he is well, but he is not, he is very liable to relapse. Keep him quiet, remove him from all disturbing causes, and give him a purer atmosphere, nourish him, let him have the boiled bacon as suggested by Dr. Thomson, or fresh butter and plenty of it. I am satisfied that I have seen the best effects from a free use of this article. I do not like soups, but prefer animal broths to slops. Let him have plenty of cream, fat beef and mutton, and still he is not cured. Give him tonics and stimulants, liquor every day, keep him partially drunk with mint juleps or blackberry cordial; I prefer the mint juleps. Still, however, the tendency to recur continues, or you may find the disease assuming a chronic form, the child becomes puny and emaciated. In such cases nothing braces up a worn down child better than a bark jacket, made with flannel, and reaching from his neck to his hips. It acts as a tonic. Continue the brandy or whisky, or whatever stimulant you may be using, keep him as much as possible in the open air, and regulate the secretions from the liver and kidneys. One-fourth of a grain of calomel with one-half of a grain of quinine may be used with advantage for this purpose.

Dr. Powell. I do not understand Dr. Wible when he says the skin is already hot and inflamed in this disease. I find the surface very often of an icy coldness. When there is preternatural heat of the head and trunk, there is apt to be coldness of the extremities. The indication is to equalize the circulation, and this is best by the application of heat to the extremities and cold to the head.

Dr. Wible. I find very frequently that co-existing with this disease is a diffused eruption like prickly heat, and it was to this condition I referred when speaking of inflammation of the skin.

Dr. Hewitt. I have devoted much attention and reflection to this subject, but cannot say that I have made any discoveries

unknown to other gentlemen. The disease seems to be peculiar to the U. States, and especially common in cities, and still more especially so to the narrow streets and alleys of those cities. Wherever persons are crowded together, the atmosphere becomes vitiated and the susceptibility to disease enhanced. I conceive that the management of the child previous to the attack, and in early life, has much to do in predisposing to or preventing the occurrence of the disease.

A Frenchman whose name I have forgotten, has remarked that he had not ever known a case of Cholera Infantum to occur in a child who had been kept at the breast during the first seven months of its life.

I am satisfied that milk is the proper nourishment for children, and if the child is fed on milk, gradually increasing the supply while you diminish that obtained in nursing, you do not administer any shock to the system while weaning. In the treatment I believe we should keep the child cool, take off flannel, let the air circulate about him, don't allow him to lay on a feather pillow, but on a folded sheet. As for medication, I have nothing to add to what has already been said. My experience has taught me to depend on minute doses of calomel for allaying the irritability of the stomach so common in this affection. I also use iced gum arabic water, quinine does sometimes arrest this disease, and that malarial poisons have some direct connection with its production seems more than probable. Quinine and tannin with mucilage make a more palatable mixture than the solution of quinine alone. A condition occurs frequently in this disease in which the food passes off entirely undigested, in which the stomach is at fault. In such cases the cod liver oil acts very efficiently.

Drs. Powell, Caldwell, Wible, and Cook, concurred in the opinion that the oils and fat were of essential benefit, and cited cases in which they had administered them in the form of butter, gravy, or cod liver oil, with marked success.

Pathology of Thymus Gland.—According to M. Friedleben—1. The thymus gland, neither in its normal nor in its hypertrophied state, suffers any turgescence except after food; there is no such thing as a hyperæmia and periodical turgescence. 2. It never interferes with respiration or circulation either in its normal or in its hypertrophied state; nor can it compress the respiratory nerves, nor does it in either of these states interfere with the cerebral circulation, or the innervation of the muscles of the glottis. There is no such thing as a thymic asthma.

Editorial Department.

Our readers will remember that in a former issue we published an account of a case of vesical calculus with a tooth for a nucleus, communicated to the College of Physicians and Surgeons by Dr. Pirtle. In this instance the patient accounted for the presence of the tooth in the bladder by supposing that she had inadvertently swallowed it. Dr. Pirtle admitted the probability of this explanation on her part, and also the probability that the tooth might have passed, by a slow ulcerative process, from the intestinal tract to the bladder. Whether this means of accounting for the nucleus be positively correct or not, Dr. Pirtle may have the satisfaction of finding that at least one such instance has occurred, in which all the circumstances have been so carefully related as to leave no reasonable doubt of their truth. We give the case entire:

VESICAL CALCULUS FORMED UPON A PIECE OF SLATE PENCIL.

(*Communicated by Mr. Alfred Roberts.*)

T. B., aged 47, admitted into the Hospital August 9th, 1859, is a sawyer by trade, and resides at Wolongong. Has occasionally drank freely, but has enjoyed good health. Six months ago, while at work, a friend called him to have a glass of spirits, and going into the house for the purpose, he picked up a piece of slate pencil, which by habit he put into his mouth and swallowed with the spirits while engaged in conversation with his companion. He immediately mentioned the circumstance, and was assured by his friend that it did not matter. On the following or second day, when jumping from a piece of timber, he experienced a sudden, sharp, and prickly pain in the right lumbar region, which continued more or less for five weeks (sometimes keeping him in bed for a couple of days, and always preventing him from work), when it ceased, giving place to all the symptoms of vesical calculus in a severe form. Although he firmly adhered to the above account, it appeared so improbable that the pencil should have found its way from the intestine into the bladder, without greater constitutional and local irritation, that I diagnosed a renal calculus passing into the bladder, upon which the large calculus, probably phosphatic, which the sound detected had formed. The man was prepared for lithotomy, which was performed August 18th. The stone was found to be large and very soft, breaking readily between the blades of the forceps. One end having thus come away, I felt to my surprise the cut end of a piece of slate pencil. This I now seized, but it came away from its bed, and I was obliged to remove the calculus piecemeal. The man made a good recovery, and was discharged quite well on September 24th, 1856.

Immediately after the operation, and while he was still partially under the influence of chloroform, I asked him abruptly, what he passed the pencil down his penis for? But he naturally and without hesitation replied that he had swallowed it. I have since written to my friend, Mr. Lambert, who sent me up the case, to make further inquiries as to the truth of his account. He writes me, that he has seen the person (a small farmer and respectable) who was with him at the time, and that he *fully corroborates* his tale.

The piece of pencil is two and a quarter inches long, and of the smooth made kind, called the Dutch pencil, it is bluntly pointed at one end, having evidently been used a little after it had been sharpened. It is quite perfect, each mark of the knife upon it being distinct. The calculus measured from 3½ to 4 inches, by from 1¾ to 2 inches length and width, and is of the fusible or quadruple phosphate variety. The portion saved weighs dry, six drams, probably three drams more were lost during the operation. I have left no stone unturned to elucidate the truth of this very interesting case, and can only state that after much hesitation I have arrived at the conclusion, that the pencil was swallowed by mouth, and made its way by inflammation and ulceration into the bladder. What course it took can only be surmised at, but probably it was in some portion of the small intestine at the time he made the jump, the concussion of which threw the foreign body across the intestine, bringing the pointed end opposite the bladder, and pointing as it were to it. But it may be asked, Would the small intestine under the influence of a body weighing six drams, suddenly stretch to the length of the pencil?—if not, then it most probably became entangled in a fold of mucous membrane, but in this case it must have occurred in the first portion of ilium. These are questions, however, which I presume can only be solved by a post mortem examination. I inclose half of the pencil, which will subsequently be sent to Guy's Museum.—*Med. Times and Gazette.*

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*Physiological Considerations of Epileptic Attacks.** By M. FOVILLE. *Translated by* JAMES S. MOREL, M.D., *of Savannah, Ga., for the Semi-Monthly Medical News.*

PREFACE.—The practice of medicine can not be properly styled a science; it is the art of applying the hints furnished by the natural sciences to the relief of the sick. Every step realized in these sciences bearing upon medicine, called accessory, has also been the starting point of a corresponding advance in the art of healing. Every discovery in physics, chemistry, or natural history, and, above all, in anatomy and physiology, has assisted in developing something before unknown in the domain of pathology. It is in this way that the labors of Th. Bonet and Morgagni, by opening the field of pathological anatomy, have been the signal for the most important advancements in the knowledge, and consequently in the treatment of disease.

It must, however, be confessed that if all of the nosological classes have profited by the lights furnished by this new science, there is one in which these advantages are less manifest. I speak of nervous diseases. All who have investigated them agree that post mortem examinations rarely yield just ideas of their origin, and by recording the varied lesions which may accompany them, such heaps of isolated or contradictory facts have accumulated as to render it impossible to deduce from them any uniform theory. It is an analysis which has not lead to any synthesis.

If the progress of pathological anatomy has been of little aid

* Thesis soutenue a la Faculte de Paris le 13 Decr 1857.

to the knowledge of nervous diseases, the same can not be said of the advancement of physiology.

It would doubtless be easy for us, if we knew the secret of innervation in its results and details, to conceive its disturbances and perhaps apply a remedy for them, but unfortunately we are far from possessing that knowledge. But because much remains to be discovered, let us be careful not to be unmindful of the importance of what we have already acquired. The physiology of the nervous system has recently been enriched by numerous discoveries, and each of them has assisted in clearing up some point of pathology. This is eminently true of the *reflex* or *excito-motor* power. The existence of this function had already been hinted at at different periods. Haller, Prochaska, Legallois, and Hubert Mayo, among others, had observed and pointed out facts which were explained only by a particular reflex property of the spinal marrow. But from these isolated observations no clearly defined theory had yet been evolved, when almost at the same time in the year 1833, J. Muller in Germany, and Marshall Hall in England, proposed their theory of reflex motion and the excito-motor power, a theory which has since assisted to explain many physiological and pathological phenomena.

Among other results of this last species, Prochaska, J. Muller, and Marshall Hall are unanimous in considering the different convulsive diseases, hysteria, tetanus, hydrophobia, and epilepsy, as vassals of this power.

Marshall Hall, above all, has by this theory tried to explain the principal phenomena of epilepsy;* but by the side of many correct and ingenious views he has allowed evident errors to glide in, the real inconvenience of which is the proposition he makes of treating this disease by a useless and at the same time a dangerous surgical operation.

I can not adopt all of the opinions of this author, but yet I believe in a general way his views are correct, and I will endeavor to point out how the physical laws, particularly those of the reflex power, may aid in the explanation of certain symptoms of epilepsy. I will not attempt to resolve all the problems relating to this disease; it will always, perhaps, more than any other disease, present something beyond our know-

* Apercu du systeme spinal. Paris. 1855.

ledge and our researches, the *quid divinum* of antiquity, the *quid ignotum* of every age.

But while I freely confess that it is impossible to unveil the whole truth, I will believe that I have performed a useful deed if I can cast some light on the mechanism of symptoms still enveloped in obscurity. Such is the object of this inaugural dissertation which I now present for the approbation of the faculty. I hope I will be excused for giving only a general expression of the facts and results, without going into a descriptive detail of every symptom demonstrative of each physiological datum. I would not be able to do so without overstepping the limits of a work of this kind.

I will first present a concise resume of the principal points of the semiology of epilepsy, and a few of its physiological data. Then I will endeavor to explain the first with the assistance of the second; and terminate by brief therapeutic considerations, based upon this physiological investigation.

I. By epilepsy I understand not only idiopathic or nervous epilepsy, a functional disease, without material lesion, but also what the ancients called sympathetic and symptomatic, and which at the present time is designated by eclampsia or epileptiform attacks. The identical form of all of these convulsive or apoplectic* attacks permits them to be registered in the same class when it is necessary to examine them physiologically.

No orders of symptoms mark the beginning of the attack and control the series of phenomena which forms it.†

One, which may be called the negative symptom, is the loss of consciousness; it is accompanied by a pallor, which, it is true, frequently passes away unobserved, but which may be seen‡ by any one present at the beginning of these attacks.

The other, or positive symptom, is the tonic convulsion of

* Voyez Trousseau et Prideaux. Tracti de Therapeutique t. 11. p. 174. Moreau (de Tours.) Memoires de l'academie de medecine, t. xviii: etiologie de l'epilepsie, p. 2. et 3.

† Voyez Billod (Annales Medico-psychologiques, Novembre, 1843. t. 11.) Symptomatalogie de l'epilepsie p. 392.

‡ Voyez Trousseau, Lecons cliniques l'Union medicale, Bland Radcliff, London Medical Times and Gazette, 1856, p. 303, 304. Brown Sequard Experimental and Clinical Researches applied to Physiology and Pathology: Boston, 1857, p. 51. Delasiauve, Tractie del'epilepsie: Paris, 1854, passim.

the muscular system; it is at first general, then it extends to the muscles of the respiratory apparatus, which by causing rigidity of the walls of the thoracic cavity, brings on asphyxia, which rapidly increases and would prove fatal to the patient, if it continued for any length of time.

Fortunately the muscular contractions, at first permanent, are suspended, to recur again it is true, but relaxation again takes place, and the intervals becoming longer and longer, the contractions at last entirely disappear. The rapid succession of muscular contractions and relaxations are changed to rough and jerking fits of the trunk and limbs, which constitute the clonic stage of the attack. The result of these changes is to establish imperfectly at first, but soon more completely, the play of the lungs and to put an end to the asphyxia. Although this scene may pass away in a few minutes, the nervous centers momentarily engorged with black blood like the other organs, have suffered very seriously. Their disturbance is exhibited by the duration of the apoplexy or coma.

The period of restoration comes on at last, during which time a normal sleep succeeds the coma. The functions of organic life first, then those of relative life are slowly re-established. The patient at last returns to consciousness without remembering any thing that has passed, but for a variable period he suffers from greater or less intellectual weakness.

Such are the series and succession of the principal phenomena observed, and which constitute a complete attack of epilepsy, and what is called *le grand mal.**

The loss of consciousness and the asphyxiating convulsion of the muscular system, are the two characteristic features of an epileptic attack; these prevent us from confounding it with any other pathologic form; they are produced at the same moment, and the beginning of the attack is always unexpected and sudden.

It may, however, be announced by various premonitory signs.

Some are announced many hours or days even by distinct

* This train, this subordination of symptoms of the epileptic attack, hinted at by Boerhaave (de morbis nervor, t. 11. p.625, and Van Swicten, courment, in aph. 1073, have been well described by Mr. Beau, archives generales de medicine, annee 1833. M. Billod has also given a good description of it. Mem. Citi.).

prodomes; these are general nervous disturbances. Others are immediately produced, and consist on the contrary of local and circumscribed disturbances: they are scientifically known as the *aura epileptica.*

I can not at this time enter into a minute history of the aura, but will only remark that the most convenient mode of describing them is, that they appear under two forms; one is the muscular or motor, the other is the sensitive.

The first may consist in complete translation of motion: thus, some persons run sometimes backwards and forwards, or reel before falling; but most frequently it is evinced by a painful muscular contraction beginning in a portion of the body more or less distant from the brain; the hand, foot, arm, or the leg; a contraction which gradually extends to the entire limb, then to the trunk itself, from this point causing rigidity of the thorax, it becomes asphyxiated, at the same time loss of consciousness takes place; the conjunction of these two symptoms characterize a complete attack of epilepsy. This transformation of a simple local cramp in an epileptic attack takes place in general, only after a long time. I suppose these convulsive movements, limited at first to the toe, successively extend to the foot, to the leg, to the thigh, and it is only after a great while, sometimes years, that it progresses far enough to bring on a complete paroxysm. Many examples of this gradation of symptoms may be seen in the writings of Hollier,* Maisonneuve,† and Portal.‡ In most of these cases, even among those who have had the complete attack, the ascending progress may be arrested and the fit prevented by applying a ligature or by rubbing and extending the member in which the contraction began.

The sensitive aura has long been known. Galen, in reporting an observation of this kind, introduced the word aura, which has since been used to signify the immediate prodomes of epileptic attacks.

Sometimes it effects the general sensibility and consists of a bizarre sensation, most frequently compared to a cool stream or air, a kind of chill or tickling, which, commencing in

* De morbis internis, lib. 1, cap. xvi.

† Recherches et observations sur l'epilepsie. Paris. 1856.

‡ Observations sur la nature et le traitement de l'epilepsie. Paris. 1826.

some part of the body, ascends along the limb in which it began, invades the trunk, finally it reaches the neck; at this moment insensibility and the asphyxiating convulsion take place. This constitutes a complete attack.*

In this case the ligature and tractions have interrupted the propagation of the aura and prevented the paroxysm.

Both kinds of aura may be present at the same time in the same individual.

Until now we have only considered the complete paroxysm, the *grand mal*, characterized by the total loss of consciousness and the convulsion of the whole muscular system. The last consists of two periods, the tonic, during which asphyxia takes place; the other is the clonic, during which the asphyxia is dissipated, then comes on the coma, which is variable in its duration.

But these symptoms are not always of such intensity. For example, the pallor and loss of consciousness may be unaccompanied by convulsions, and altogether evanescent; this is what is called the epileptic vertigo; or there may be muscular contraction limited to a certain region without any intellectual disturbance. At other times the loss of consciousness is accompanied by a simple jolt, or a few convulsive movements of short duration; in a word, the two elements of a complete paroxysm, loss of consciousness and muscular contraction, may be singly or simultaneously awakened, or one or both may be entirely wanting, the other being either complete or feeble.

Between these extremes there is room for a great many intermediate combinations which form the series of partial or incomplete attacks.

II. It is not my purpose to notice all that relates to the excito-motor or reflex power of the nervous system. This theory is known to all, and it is treated in all of its details in the physiological works of the day.

I will only offer, in the form of propositions, a few points directly applicable to my subject.

1. An excitation emanating at some point of the economy, transmitted by the sensitive nervous filaments, either to the spinal marrow or the encephalon, is reflected by the intersection

* De locis affectis, lib. iii. cap 7.

of these centers to the motor nervous fibres, to give rise to movements over which the will has no control.

2. These motions are manifested in the muscles of animal and organic life.

3. The centripetal excitation which is reflected by these movements in either of these orders of muscles, or in both at the same time, may be experienced and transmitted by the cerebro-rachidian nerves or by filaments of the great sympathetic.

4. The peripheric excitations, according as they do or do not reach the seat of the perception of sensations, the sensorium (?) are or are not transformed into sensations. They are then perceived or not perceived, felt or not felt.

5. This excito-motor power is inherent to the spinal marrow itself, and entirely independent of the cerebrum and the cerebellum; and manifests itself with more energy when the marrow is free from cerebral influence. Divers substances may modify it. *Strychnine* and opium heighten it; *ether*, according to M. Longet, and *hyoscyamus*, according to Marshall Hall, diminish it.

6. The motor reaction has a constant tendency to proceed by the motor filaments arising nearest the sensitive roots which transmit the excitation.

7. When the excitation is greatest, or the excitability is increased, the reaction extends to the motor roots to a much greater length of the marrow, sometimes above and sometimes below the point of the insertion of these excited filaments. It may even extend to the whole of the motor roots. Thus a very lively local excitation, or when the excitability is very much increased, even a very slight local excitation may bring on general convulsions.

8. The excitability of the bulb and of the medulla oblongata, is exhibited principally by movements of the respiratory muscles. It is called into play above all by exciting the mucous membranes and the external teguments. Besides, the excitations which bear upon the termination of the nerves, are much more apt to determine reflex motions than those which are directly applied to a nervous trunk.

9. The reflex excitability is exhausted when it is provoked a great many times in succession. Then, if new excitations

are produced, the energy of the muscular reaction diminishes and soon ceases altogether. The more exalted the excitability, the more quickly is it exhausted when it is put into action. It is from this cause that death takes place from poisoning by strychnine.

10. The reflex excitability is, on the contrary, kept up and increased, when it is called into play at certain intervals. For example, two frogs being decapitated, if one of them be left in perfect repose for many days, and the other is moderately but frequently excited every day, at the end of this time the reflex excitability of the second will be considerable; it will suffice only to twitch it slightly to cause general convulsions. The first, on the contrary, will possess but a very slight degree of excitability; even very violent excitation will determine very limited motion.

Such are the principal conditions of the manifestation of the intrinsic power of the gray substance of the marrow, a power which makes it act as a true center of motor-reflexion, entirely beyond all cerebral influence. The intrinsic power peculiar to the marrow is not put into play only by the impressions that the sensitive spinal or filaments of the great sympathetic transmit to it. The nerves of special sense are also capable of determining involuntary movements. It is in this way, that when the eye is threatened, the eyelids close; a loud noise also produces the same effect. Certain odors bring on motor manifestations—vomiting, for example. It is true that the defect of a relation between the roots of these nerves and the marrow is only apparent at this day, we are inclined to recognize the continuity between their white roots and the posterior fascicles of the bulb extended in the encephalon.

But they are not only the rachidian or other nerves that can call this motor excitability of the marrow into play; direct excitations of the encephalon may do it.

Marshall Hall has rejected the possibility of this fact, and considers these movements as the result of a psychical act, a manifestation of volition,* but, as M. Longet† remarks, gaping and vomiting may take place, when a person sees or hears another gaping or vomiting; a sure indication that it is not a

* Ouvrage Citi, p. 51.

† Traite de physiologie t. 11 p. 107

voluntary act. M. Longet relates of himself that after having passed many days at sea, he was unable to prevent himself from vomiting at the recollection of the agonies he had induced. No one would accuse him of having voluntarily contributed to a renewal of his own torments.

Is it by an effort of the will that a purely moral impression causes one to shout, leap or change color? How often, on the contrary, do such involuntary movements betray emotions which persons would wish to conceal?

Every one knows the effect of fright; the colics which affect the young recruit on the day of a first battle, certainly depend only upon a moral impression, and are altogether involuntary.

It is seen, then, that the spinal marrow and medulla oblongata possess a peculiar property, which render them capable of determining movements, independent of the will, as a sequence of an excitation which is transmitted by them, either by the sensitive fibres which are directly inserted in them, or by filaments of special sense, or by fibres of organic life which are mediately united to them, or finally by portions of the encephalic organs specially devoted to the collection of moral and intellectual impressions. In a word, each sensitive part of the nervous system, whatever may be its special action, whether it belongs to the organic or animal life, is sufficient to determine in the marrow the modification, unknown in its nature, in consequence of which the motor fibres react.

The circumstances under which this property is called into play are of frequent occurrence. All of the sympathetic phenomena are of this number. By experiments it may also be seen that this excitability is susceptible of increase and decrease. It is to its increase that this susceptibility to impressions is due, which distinguishes most persons attacked with nervous diseases, and to which various names have been given, without knowing in what it consisted. It is what is ordinarily called *nervous state*, that M. Gendrin designates under the name of nervous mobility,* and that many English, among others Todd,† denominate nervous polarity.

It is upon this reflex excitability of the spinal marrow and of the medulla oblongata in particular, that the convulsive

* Lecons sur l'hysterie (Gazette des Hopitaux, 1853 et 1854.)

† Clinical Lectures (London Medical and Surgical Gazette, 1853 and 1854.)

phenomena of epilepsy seem to me to depend. Let us see what really takes place in this disease, and let us take, for example, a very simple case of muscular aura.

(To be continued.)

THE STATE OF MEDICAL SCIENCE IN EUROPE AND THE UNITED STATES.

BY GERHARD C. PAOLI, M. D., OF CHICAGO, ILL.

It is an acknowledged historical fact, that great political revolutions are not only important with regard to the changes which are their necessary results in social and public life, but are often not less so in giving an impulse to intellectual development. Latent powers are awakened, and called into action, attain their full strength, and, entering into the service of the peaceful sisters, the arts and sciences, often produce the happiest fruits. The eventful political dramas for which France for the last half century has been the theater, have had a more important influence upon the intellectual progress of mankind than any event recorded in history. They were volcanic eruptions, whose shocks were felt over the whole civilized world, and necessarily spread desolation over their immediate neighborhood. But out of these convulsions arose that light whose beams, diverging into the different walks of science, animated them with a new, vigorous, and fruitful life. These revolutions have undoubtedly been productive of much good to medical science, for it is generally admitted that the direction which that science has taken, and which, at the present time, is not far from predominant every where, originated, and was principally developed in France at that period, and it seems probable that materialism, which was then so intimately connected with all science, has also had an influence in giving medicine a similar tendency.

The three great master minds, Pinel, Bichat, and Corvisart, who in the close of the last and beginning of the present century, flourished in Paris, are justly regarded as founders of the modern French school of medicine. Pinel was the first who paid any attention to the then prevailing error of considering the symptoms of disease for the disease itself. He took the

phenomena which were apparent to the senses, as the elements of disease in its different forms and stages, and endeavored to determine its organic material locality in accordance with these phenomena.

Disease was, according to his opinions, an abnormal change in the different organic cellular tissues, but in order to appreciate such a change, it was necessary to become well acquainted with the affected organ's normal structure and functions. The physician's duty was then to compare the symptoms with the changes which disease had wrought in the organ, and from the result of this comparison, analyze the disease and determine the indications.

The theory advanced by Pinel as a supposition, was simultaneously advocated by Bichat, who in this theory of organic cellular tissues, established an entirely new science, now commonly known as pathological anatomy—knowing that the whole of the human body consists of similar separate cellular tissues, all subject to the same pathological and physiological laws. He believed that disease ought to be considered according to the diseased organ's anatomical structure, and resemblance to the others, and not from their accidental locality in the system.

He next turned his attention to the study of the organic changes in the derangement of the functions of the cellular tissues in a diseased state, and by comparing these with the phenomena of the disease, and the operations of medicine, hoped to succeed in founding a system which would answer the demands of medical science. He regarded pathological anatomy as a science divided into two parts, one general, including the organic changes in each particular system, the other special, in which the examination of each separate region must follow.

His early death prevented the execution of his great plans, but all the best pathological works since his time have been based upon his ideas. Corvisart also maintained that pathological anatomy was the very foundation of positive medical science, and exerted his great influence as a celebrated clinical teacher, in obtaining a general acknowledgment of his theory. He also gave Auggenbrugge's almost forgotten theory of percussion a permanent place in medical science as a diagnostic

aid, and recommended upon the whole that great attention should be given to the physical phenomena of diseases; so that he may justly be considered as the founder of the present system of diagnosis by percussion and auscultation.

Thus the germ of the pathological anatomical school appears to have been planted at the time Broussais first became known. Although he was, in the beginning of his career, a zealous advocate of Pinel and Bichat's theories, he afterwards became (if possible) a still more violent opponent. After his return from Napoleon's campaigns, in whose army he was surgeon, particularly the second time, he attacked the then prevailing theory with as much zeal and boldness as if he had aimed at absolute sway over all medical science.

He had diligently improved the rich opportunities which these wars afforded him, of examining deceased fever patients, as well as those who had died from other diseases, and from such observations arrived at the conclusion that the material changes were almost always to be found in the intestinal canal of those subjects who had died of different fevers, and this opinion became the principal basis of his new pathological system, which may be arranged under the following heads:

1st. There is no essential fever, nor an idiopathic neurosa, nor a primary dyscrasy.

2d. All these diseases depend upon the local, acute or chronic irritation and consequent inflammation, and the first named are only symptoms of the latter.

3d. Gastro enteritis is of the most frequent occurrence of all diseases.

In harmony with these opinions, he declared the anti-phlogistic treatment and regimen the only proper one to be adopted in all cases, and leeches far the most important of all remedies, of which too many could never be applied, sixty to eighty at a time being the ordinary number applied by him.

Broussais' theory, which he called the physiological, because disease, according to him, was no new state, but only an increased activity of the normal organic action, met with so favorable a reception that it soon counted many celebrated authorities amongst its adherents. But such men as Laennec, Fodere, Chomel, and Rostan and others, soon appeared as declared opponents to his theory, and thus commenced a strife

which was waged with no slight degree of warmth and bitterness, especially on the part of Broussais' disciples. But Broussais was in consequence forced to modify his theory somewhat, particularly to make the foundation of his system less exclusive. Although it was natural that Broussais' theory, resting, as it did, upon a false basis, could not long maintain its position; yet it is undeniable, that during its short life, it was productive of permanent advantages to medical seience. We will here mention the introduction of satisfactory pathological anatomical sections, by which we have learned to recognize the frequency of the material changes in the different organs, and have thus discovered upon what a weak foundation the whole nervo solidary pathology rested.

Broussais learned from observation to penetrate into the depths of diseases, and finding that many medical terms were misapplied, abolished them, thereby taking the first steps towards the present simple method of treatment. Thus his labors undoubtedly resulted in the advancement of medical science. But to Laennec belongs the merit of raising this branch of medicine to a science. By his experiments he succeeded in perfectly collecting the scattered elements of these theories agreeable to the spirit of Bichat and Corvisart's ideas, and by a series of satisfactory experiments on diseased subjects, traced the organic changes, and greatly enlarged the field of diagnosis and prognosis in general, and we are still more indebted to him for the discovery of the stethoscope, which is so valuable in examining diseases of the lungs and heart. He was also remarkably skillful in the use of auscultation, hereby raising physical diagnosis to an importance before unknown. This method of arriving at a thorough knowledge of the material causes of diseases, and the whole of their pathological process by physical examinations, which was first proposed by Laennec, attained in the short space of two years, to such a degree of perfection, that in the most important points it has remained unchanged, notwithstanding the zeal with which it has been opposed by the highest authorities of the present time. The cause which Laennec had so successfully pursued was followed by Magendie, while, in the spirit of the times, he endeavored to reform physiology from a complete theoretic to a purely objective school, grounded on the facts disclosed

by Laennec's observations. He sought to explain many physiological phenomena on natural principles, and believed that the different forms of natural organisms must be considered as purely physical. Pathology, also, which is nothing more than the patient's physiology, was no exception to the same natural law.

He had of late particularly turned his attention to this subject, and believed that a more thorough study of this branch would prove beneficial to medical science.

After the pathological opinions of the above named men have, from time to time, been agitated in different ways, there has, not many years since, arisen a new school among the French physicians called the rational school, who, without confining themselves (in the true Hippocratic spirit) to any one system of practice, select from the different schools and systems, that which they consider indubitably true, and endeavor to unite these truths into one harmonious whole, so as to form, if possible, a systematic science, based on a better foundation than any of the old rotten dogmas.

The most celebrated pathologists, such as Andral, Louis, Magendie, Rostan, and Piorry, did, to a greater or less degree, embrace this method. They acknowledge that the fluid, as well as the solid component parts of the body, can be the primary seat of disease, and have in all their experiments this idea chiefly in view, acting upon it as a generally acknowledged truth.

During such a lively scientific strife as that which in our day has taken place in the capitol of France, it is but natural that it took a long time to become thoroughly acquainted with the principles of the new school. Therefore, many who have partly embraced it differ on some points. Thus, Boisseau, Roche, Lansan, Gendries, Bouillaud and Rostan, who are strongly in favor of Solidary Pathology, consider the different organic cellular tissues as the primary seat of disease, and endeavor to determine each particular organ's place and office in the pathological process, and all their internal relations to each other. The range of essential fever is by them considerately confined, while that of inflammation is, on the contrary, very much enlarged. Although some resemblance to Broussais' theory is here recognizable, yet these men, in their endeavor to further the

cause of science, and in their ideas in general, are very far from Broussais' exclusiveness.

On the other hand, there were those in the school, who, at the present day, in consequence of the great progress of organic chemistry, are more attracted to scientific facts founded upon humoral pathology, their attention having been especially directed to hematology, after a number of talented men, such as Magendie, and Piorry in particular, had endeavored to determine the physical qualities of blood more satisfactorily than before.

Andral, in 1842, published the first chemical analysis of diseased blood and the results thereby obtained. In several works that followed, the crude materials contained in Andral's were collected into a whole and pointed out the practical clinical interest attached to the subject. Of course, these experiments soon attracted the attention of the whole medical world, their importance in pathology being so self-evident. The conditional supposition of primary disease in the fluids being the first cause of many acute and chronic diseases, thus received a positive scientific confirmation. Although humoral pathology, which rests upon an entirely different basis, is yet in its infancy, and we can not so soon expect to see its perfect results, it is still (as far as a glance into the future is possible) tolerably certain that the healing art has much to expect from its full development; and however different may be the expectations which cluster around this theory, it must be granted that Andral, as its founder and untiring advocate, will ever hold a prominent place in modern medical history.

We see then that the principal results of the agitations in the French medical schools during the present century, are the following:

1st. There is a material cause for all the principal diseases.

2d. The original seat of disease may be found as well in the fluid as the solid parts of the body, and may be transplanted from one to the other.

3d. All the phenomena of diseases are to be considered as modifications or changes in the physiological functions of one or other of the organs.

In these short historical sketches I have endeavored to point out the most important grounds for the method of objective

observation which is at present followed in science, and will now give a few moment's consideration to their characteristics.

The French school of medicine is one of actual experience, and receives only those phenomena of diseases which are apparent to the senses and self-evident, and by the aid of known physiological laws endeavors to discover the corresponding anatomical relations between the solid and fluid parts.

This purely positive and objective theory of practice being chiefly founded upon anatomy, physiology, chemistry, and the microscope, is consequently more nearly related to the sister sciences, than at any period previous.

Pathological anatomy, whose study we have seen was so happily commenced, received its principal impetus from Dupuytren, by his exertions in procuring a donation for the establishment of a chair in the University for that science. His collection of preparations have also become the basis of the medical school and pathological anatomical museums.

I must add that this celebrated man, so much admired, was a splendid lecturer. He had a remarkable memory, and could, from his notes alone, give the most interesting and fascinating lectures, but it is an acknowledged fact that he always found great difficulty in writing any composition.

Physiological pathology is not yet sufficiently developed so as to rank as an important characteristic of the French medical school. But the results obtained from chemical experiments are so satisfactory and certain, that even if they are not so comprehensive, yet they are of vital importance to medical science, as clinical observations are supported by actual chemical experiments.

The microscope, on the contrary, was not so well received in the beginning in France; although its usefulness in diagnosis of objective diseases is admitted, still it is now generally used, and the French physicians to-day have generally adopted it. This is the form in which practical medicine presents itself to us in France at present, and in examining their medical literature we can not but be impressed with the fact that this form is a purely positive one, grounded on natural laws and known facts, and that far from striving to establish systems or forms of theories, they confine themselves closely to nature, and seem to be conscientiously engaged in the pursuit of truth; and as

we are, in a great measure, indebted to the French for the improvements in medicine during the last century, we naturally expect much from them in the future.

Although, my own expectations of the French medical school are not very extravagant, for I must confess that it is with great medical men as with great heroes, they shine brightest when seen from a distance, while the quiet daily associations of every day life rob them of much of the enchantment which distance and fame fling around them, and they appear as they really are, but men; but still, men, who are earnestly engaged in endeavoring to discover truth, and we would be but little interested in our noble profession, if we did not feel that in France dwell men of genius, whose creative powers, and earnestness in the pursuit of knowledge, animate us to similar exertions in the same noble cause.

Medical science in Germany at that time stood perhaps in a subordinate relation to France. Paris seems to have its medical as well as fashionable centralization. It must be admitted, however, that Germany had a rich medical literature, although the books were filled with abstract metaphysical theories, which produced a bewildering influence on both professor and student. While the teachers were endeavoring to explain these false theories, the students forgot to study nature, and were thinking more about abstract ideas than the patient who was lying before them. But a great revolution took place even in Germany, and the men who may be principally considered as leaders or founders of the school, were John Muller, Langenbeck, and Dieffenbach. Muller, in particular, paid great attention to animal chemistry, microscopic examinations, and physiology. He thoroughly investigated pathological anatomy, and considered thorough investigation the only true basis of knowledge; and we must not forget that the great chemist, Liebeg, exerted a great influence in advancing many facts upon which the science of physiology is based at present. Dieffenbach has greatly benefitted Europe by his celebrated works on operative surgery, which contain a valuable collection of his own experience. What he has seen is described with clearness. He never tires his readers with suggestions and classifications, but all his descriptions are exceedingly plain, and the

rich originality which runs through the whole work makes the reader feel that Dieffenbach has produced a work that will be consulted for many generations to come.

Since the death of Dieffenbach, Graefe seems to be the most eminent oculist and surgeon. In the hospital where he is clinical teacher, he has, of course, a great opportunity to develop his own remarkable talent, and teach others his immense experience.

After having mentioned a few of the most prominent of Germany's medical men, I shall say a few words about England. Medical science in England appears to have taken quite an independent stand as regards other European countries. No doubt one reason for this may be found in the antipathy of the English to foreign languages, and the exclusiveness of the English mind limited them more to observations in their own country, and being pre-eminently matter of fact people, they are disinclined to adopt any new theory rashly. While France was laboring to explode false theories, Great Britain seems to have confined herself to close observations of nature. When Dupuytren flourished in France, the memorable Astley Cooper was the most prominent lecturer in London, and in my opinion his works are written in the most clear and forcible manner of any writer on medical science. In every journal he has written, you see the patient before your eyes. As a medical writer, he has scarcely his equal; and as a lecturer he was brilliant and harmonious.

As the great medical men of Great Britain are well known, I shall at present only mention Dr. Todd, who, without doubt, deserves a high place in our profession. He is a thoroughly practical man, and when he writes in a medical journal, you are always struck by his close observations of nature, and his plain and simple method of treatment. His clinical lectures are always attractive, and display deep and profound research. His treatise upon fever, nervous diseases, erysipelas, and pneumonia, deserve our highest admiration.

I shall now endeavor to draw the line of demarcation between Europe and the United States in regard to medical science. In America we have not the centralization to one point as in Europe, but medical science is equally distributed everywhere, like our political power, whose strength is in county and

township, as well as State; so, everywhere in this country, we find great medical men. The American, like the Englishman, is peculiarly practical, and has great antipathy against all theories not founded on facts; and as our political institutions are based on individual independence, it necessarily follows that every one must struggle to maintain his position as well as he can without royal or government favor. Here, it is the people who direct and support all public institutions, and physicians are not chosen for life to take charge of hospitals as in Europe, and therefore physicians here have not the opportunity to devote their whole time to investigation and study as in Europe, where they have governmental support. Here we are obliged to depend on our own resources, and when men, surrounded by difficulties, and struggling for an existence, attain to the same degree of excellence as those who are more fortunately situated, we must acknowledge that such men show not only greater energy, but an independent spirit that enables them to succeed without any remuneration from an aristocratic arbitrary power. Movements for the amelioration of suffering humanity were early commenced in this country, and institutions were established which the United States may justly be proud of, namely, the lunatic asylums, institutions for the deaf and dumb and blind. Not many years ago I remember well in Europe that deranged people were closely confined in dark dungeons, denied both fresh air and light, and with little or no medical attendance. It was in this country that the first steps towards a more rational treatment of those poor unfortunates was made; and it is to-day generally acknowledged that our lunatic asylums are conducted upon the most rational and best system. A great movement is also being made in this country for education in our profession in each county and state, and a unanimous feeling seems to prevail that all ought to unite to promote the true development of medical science, and the yearly meetings of physicians will gradually advance medical literature, which, in latter years, has increased, and many medical journals in the country have been favorably received by our profession. In Europe, medical journals are in the hands of those men who live only in the large capital cities, and other physicians in provincial towns, are thereby retarded in their literary pursuit. Here, journals are published all over the

country, which, of course, not only abolishes all centralization, but is a great stimulus to all who have a noble ambition to cultivate their talents. In many portions of Europe they are still extremely tenacious of antiquated customs. For instance, the degree of doctor of medicine must be taken in the Latin language. The candidate must first take his degree of licentiate, and afterwards the doctor's degree. He must produce a dissertation, and meet his opponent, who attacks him both for the language and the substance of the article. As there are few who speak Latin fluently, the whole proceeding is a silly and ridiculous farce. Of course, it is not the case in all Europe, but these customs do still exist in several countries.

Here all these ancient customs have been thrown overboard, and the fundamental principle is, that knowledge is open to all who will acquire it, without the hindrance of useless scholastic customs and speculations, which are only obstacles in the student's way; and here, too, we are trying to investigate and learn strictly matters of fact.

It is true that the many great hospitals of Europe offer excellent opportunities for observation, and Paris, London, and Vienna possess great attractions in this respect, but what is there taught is soon spread over the United States, and when we take into consideration the number of hospitals in the large cities in this country, there are, I think, ample opportunities here for improvement by observation; and the day is not far distant when European medical men must, and will, acknowledge that this country can boast of men as earnest in the pursuit of knowledge, and as skillful as those of any part of the world.

Case of Angeioleucitas. By Archie B. Cook, M.D., *Demonstrator of Anatomy, University of Louisville.*

The patient, John Mellus, aged 51, nativity America, occupation a laborer, was admitted into the Louisville Marine Hospital, August 9, 1859. He stated that he had, previous to his present affliction, always enjoyed good health, and had been of temperate habits. He had been, during the spring months, engaged in taking out wet lumber, the feet and legs, and fre-

quently for hours the whole lower extremities, being immersed in cold water, which daily and long continued exposure appeared to be the immediate exciting cause of his illness.

About the middle of July he was compelled to relinquish labor. He then had general fever, pain and stiffness of the right leg, with some swelling and red inflammatory streaks extending up the leg on either side of the internal saphenous vein.

I did not learn the character of the medical treatment, but he continued to grow gradually worse until the date of admission. His general symptoms at this time were those of debility from a disease of exhaustion. He was pale and spanæmic, pulse feeble and rapid, tongue furred, loss of appetite, a low grade of fever, restless and wakeful at night. The local symptoms were, inability to move the right leg, cutaneous redness, indicative of a low grade of inflammatory action extending from the internal malleolus to Poupart's ligament, the redness embracing a strip of integument about three inches in width. This diseased part was tender on pressure, tumefied and hard, with a series of abscesses along the course of the lymphatics. There were seven abscesses in all, three on the leg, three on the thigh, and one opposite the knee-joint. Two of medium size had opened a day or two previous to admission. On the 10th I opened the thin one on the leg, which discharged about two ounces of sanious pus; on the following day two on the thigh were lanced, one of large size immediately below Poupart's ligament, which voided one gill of pus; this one connected with a sinus which extended six inches down the thigh, lying external to the saphena magna. The second abscess was developed a little above the knee, and also connected with a sinus extending six or eight inches up the limb, and on the inner aspect of the great vein. The remaining abscesses were small. The larger ones were kept open by the introduction of a tent, and continued to discharge pus in considerable quantity for several days.

Medical treatment:

Local.—The first day I ordered a lotion of Plumbi Acet. (5 grs. to 1 oz.), in infusion of opium. The following day I ordered the diseased part from Poupart's ligament to the internal malleolus to be painted with a saturated tincture of iodine,

which application was made daily until the 2d September, when the abscesses and sinuses had all healed, and all hardness and inflammation had disappeared.

Constitutional Treatment.—A pill containing one and a half grains Sulph. Quin., and one grain Ext. Hyoscyami, given four times a day; one bottle porter daily. On 1st September the Hyoscyamus was suspended, and six grains Quinine given daily with porter and full hospital fare.

The patient was discharged cured September 12th.

Pharmaceutical Department.

By T. E. JENKINS, Pharmaceutist.

PREPARATION AND USES OF IODIDE OF SODIUM.

On account of the high terms in which Iodide of Sodium has been spoken of in the late periodicals as a therapeutic agent, several physicians have been induced to try it in their practice, and have called upon us to prepare it for them, as it could not at the time be obtained from the regular traders;—and from the superior effects which this combination of iodine has manifested in their hands, it is thought well to give some account of the best mode for its preparation, and detail some of its principal advantages.

The first three or four lots which we prepared were made by first converting the iodine into Hydriodic Acid by passing washed Sulphuretted Hydrogen through water in which the iodine was diffused, and subsequently accurately saturating the acid with Carbonate of Soda, and evaporating to dryness. This process is a pretty good one, and will furnish a good product, and when properly conducted yield the full amount; but one great objection in the way of its general adoption, by the physician and apothecary, is the disagreeable nature of the Sulphuretted Hydrogen Gas.

Another process is to add Iodine to a solution of Caustic Soda. This procedure will give a mixture of Iodide and Iodate of Soda. The latter salt, however, will be converted into the

former when the mixture is evaporated to dryness, and the dry mass is heated for a short time to low redness in a crucible.

We have not experimented with the last mentioned process, and, consequently, can not speak advisedly of its merits. But the following is one which we have tried a number of times, and are so much pleased with its operation that it has been adopted in our laboratory:

Take of Iodine, pure, - 1 lb.
" " Iron wire (piano wire) ½ lb.
" " Water, - - 32 oz.

Put the ingredients into a bottle (a mercury flask will answer best), and shake the whole together until combination between the Iodine and Iron is complete, which may be known to be the case when the froth on the solution is white. The resulting solution of Iodide of Iron should then be filtered into a wide mouth glass jar, and diluted with about three quarts of boiling distilled water, and immediately a strong and hot solution of carbonate of soda should be carefully poured in until a bluish white precipitate is no longer produced, taking care to avoid an excess of the carbonate. The whole mixture should then be thrown on a filter, and after the liquid (which is a solution of Iodide of Sodium) has drained through, the remaining precipitate may be washed three or four times successively with hot distilled water, and the washings added to the solution first run through. This solution should then be evaporated, at first rapidly, and towards the close more gradually and carefully, with constant stirring to complete dryness. Care should be taken as the salt approaches dryness to regulate the heat so as not to fuse it, since it appears better when simply dried and granulated.

This salt is exceedingly deliquescent, and should be inclosed in small and closely stopped bottles while yet warm. It may be crystallized with 20 parts water by very careful evaporation. Its form is the cube, its taste is saline and cooling, not unlike a mixture of common salt and nitre, and quite different from that of Iodide of Potassium. When left exposed to the air it attracts moisture and becomes liquid. It is soluble in and compatible with most tinctures, infusions, decoctions, and extracts. It should not be prescribed in pill or powder, on account of its deliquescent property, but should be given in solu-

tion, for which its not unpleasant taste especially fits it. This is the salt which exists in sea water, and in the ashes of sea weed, and of the various plants which grow on the sea shore. Iodide of Sodium exists as such in the "burnt sponge," and we find that Iodine is almost always found associated with Sodium in nature. It appears to prefer, so to speak, sodium to potassium in its combinations, for it is proved that iodine exists very much more abundantly in plants whose ashes are rendered alkaline by soda, than in those in which potassa abounds; in marine plants, than in land vegetation. It is also remarkable that this metalloid is found in the oil of the salt water fish termed Gadus, to which class the cod belongs; but it has not been discovered as a necessary element in the tissues of land animals.

The chemical constitution of Iodide of Sodium compared with that of Iodide of Potassium, is as follows:

Iodide of Sodium consists of

Iodine, - - -	84.45 per cent.
Sodium, - - -	15.55 " "

Iodide of Potassium consists of

Iodine, - - -	74.27 per cent.
Potassium, - -	25.73 per cent.

Showing that in every hundred grains of the former salt there are 10.18 grains more of Iodine than in the latter, and although it contains so much more Iodine, still it is perfectly neutral, and the irritant quality of the Iodine is completely counteracted by the base.

Alexander Ure, Esq., surgeon to St. Mary's Hospital, London, who has used this salt extensively, with a view to test its value, says: "As far as my experience goes, it is a blander salt, more assimilable, and better borne by the stomach than Iodide of Potassium. It is, moreover, much less prone to produce symptoms of iodic disturbance. Patients under my care have taken it for weeks together, without suffering the slightest inconvenience, and with uniform advantage as regarded the morbid condition."

He further says that there has been no complaint made of this medicine producing sense of weight or uneasiness referred to the stomach, nausea, impaired appetite and digestion, headache, running from the eyes and nostrils, general nervous de-

pression—symptoms which, at times, supervene during the administration of Iodide of Potassium, even in moderate doses.

An argument in favor of the use of this salt is taken from "the important view first announced by M. Dumas, in the 92d volume of "Annale de Chimie," which goes to show that there are certain salts which leave the blood the faculty of becoming arterialized, while others deprive it of this property, and that the salts having soda for their base are more proper to maintain this condition of integrity than those of potash or ammonia." If such be the case, it may fairly be assumed that the former are likely to exercise a more favorable remedial influence than the latter, especially if exhibited continuously for a length of time.

Soda variously combined, is diffused extensively throughout the organism; fully five-sixths of the saline constituents of healthy blood consist of salts of this base.

M. Gamberini in Schmidt's Jahrbreck for 1858, reports 116 cases of secondary syphilis, which were treated with the Iodide of Sodium, and he has found that it acted more rapidly than the potash salt, and often proved efficacious where the latter salt had been of little or no avail. He recommends it to be given by dissolving twenty grains in three ounces of distilled water, and this to be taken in broken doses throughout the day; after a few days the amount may be increased to twenty-six grains, and so on until the patient comes to take two drams daily, the time for taking it being one hour before meals. It is recommended to associate five or six grains of Bicarbonate of Soda with it to counteract the acescency and the consequent liberation of Hydriodic Acid in the stomach, which is sure to cause headache; and the best plan is to administer it dissolved in plenty of water.

There are in Prussia about 75 manufactories of phosphorus matches. These present annually from 35 to 40 cases of maxillary necrosis. Those workmen were more especially attacked whose business it was to prepare the phosphorus paste and dip in the wood. In all cases the disposition to this affection manifested itself in those p ersons, both male and female, who were of a cachectic or scrofulous habit, and had carious teeth before entering the factory. On this account it is not proper to admit to this occupation sickly persons or those who have carious teeth.—*Vischew's Constatt.*

Asphyxia from Chloroform—Artificial Respiration by Faradisation of the Viaphragm, and by Methodical Compression of the Abdomen—Resuscitation. By Dr. Herm. Friedberg, *in Berlin. Translated from Virchow's Archives for Pathological Anatomy and Physiology and Clinical Medicine.*

The responsibility of the physician, both in a humane and forensic point of view, is so considerable in asphyxia consequent upon the use of chloroform, and the necessity of giving speedy assistance so urgent, that the wish to establish a process for saving the life of the patient seems justified. May the following communication aid in the fulfillment of this wish:

Otto Krause, four years old, from Berlin, was received into my clinical hospital the 7th May, 1858, on account of an encysted tumor of the lower lid of the left eye. After inefficient application of discussive remedies the tumor was to be extirpated the 15th of May. Before the operation the boy inhaled the chloroform poured in the quantity of at most a dram on a sponge fastened to a linen compress, held before his nose and mouth. During the inhalation I turned to the practitioner who was to operate, in order to give him a few more directions. I had withdrawn my attention from the child for at the utmost two minutes, when I looked to him again and perceived a sudden change in his countenance. At the same time my assistant perceived that the pulse had just become very small. I only heard one more short, rattling inspiration, after which respiration ceased. The face was livid, the eye fixed, the end of the tongue pressed against the compressed teeth, the extremities were relaxed. The child was immediately raised up, the windows opened, and cold water sprinkled on his face and chest, whilst liquor ammon. was held to his nose. I rapidly passed a small sponge over the epiglottis to the larynx, partly to remove mucus that might have collected there, but principally to excite the mucous membrane, and to provoke coughing. In the mean while the thorax was excited, sometimes by rubbing, sometimes by rapid strokes with a compress soaked with cold water, with a view to produce inspiratory movement. These attempts to recall life were continued for about two or three minutes, when a further change in the state of the boy was perceived. The pulse disappeared entirely, the

countenance was now pale, the features like those of a corpse, the lower jaw was hanging down; when the eyelids were opened to inspect the pupil, they remained open; the pupil was dilated. As all the applied incitants remained without effect, on account of the intense anæsthesia from the chloroform, and could not retain the escaping life, I forthwith had recourse to artificial respiration, which, as experience established, is capable of increasing the vanishing energy of the heart so much, that it can again display an activity sufficient to sustain life. I did not wish to detain myself with blowing in air through the mouth, for this process is always uncertain, because it is impossible to know whether all the air is not pumped into the stomach.

A more reliable process we have in the methodical compression of the abdomen which, was excited with Otto Krause. Whilst an assistant compressed with both hands placed flat below the navel, the abdomen, the boy lying on his back, in order to prevent the downward escape of the contents of the bowels, I, with both hands above the navel, forced the contents of the abdomen up towards the diaphragm, so that it rose as forcibly and rapidly as possible into the thorax. The partial evacuation of the lungs hereby effected was indicated by a distinctly audible voice, caused by the escaping air. Immediately the hands were withdrawn from the abdomen, in order to produce that extension of the thorax favorable to the entrance of the atmospheric air into the air ducts. This process was continued in the rhythm of natural breathing for about three minutes without any perceptible success. It proved a perfect relaxation of the diaphragm, for in compression no obstacle was felt, as should have been the case from the natural elasticity of the diaphragm, also the elevation of the epigastrium usually produced by the contraction of this muscle during inspiration was not perceptible.

I now had recourse to faradisation of the diaphragm, in order to induce it to contract. One electro-motor of du Bois-Reymond's induction apparatus was applied to the nervous phrenicus (where the omo-hyoid lies along the external margin of the sterno-cleido-mastoid), and the other electroinot, or to the side of the chest in the seventh intercostal space. The latter electro-motor was forced as deeply as possible towards the dia-

phragm. This faradisation was applied sometimes on the right, sometimes on the left side, the current remained unbroken every time as long as a deep inspiration lasted. The current had been broken ten times, when the elevation of the abdomen indicating a contraction of the diaphragm was perceived, at first apparently only on the faradised side, but soon distinctly over the whole epigastric region, combined with a short hiccough. When the current was now interrupted for the sake of experiment, the child executed to our joy the first spontaneous inspiration, distinctly perceptible, though weak. A second and third inspiration followed without further application of the induction-current. After the third inspiration the face was suddenly and transiently flushed,* and the radial pulse became sensible. I now thought that I might dispense with the induction-current, and leave the child to itself. But the respirations and the contractions of the heart immediately began to decrease and threatened to cease again. Convinced that now everything depended on as thorough as possible a removal of the chloroform gas, given off by the blood to the pulmonary cells, I applied again without further delay the methodical compression of the abdomen, which sufficed perfectly for the sustaining of the respiration. An unmistakable difference from the former application of compression was manifested immediately in the resistance of the now elastic diaphragm. The attempt to discontinue the compression, produced, however, even ten minutes afterwards, a menacing diminution in the respiration and in the pulse. Consequently, whilst the extremities were rubbed for the purpose of removing the anæsthesia and exciting the reflex action, and the face and chest were sprinkled with cold water, and spirits of hartshorn held before nose and mouth, I continued the compression until respiration and pulse showed the requisite energy upon its cessation. Twenty minutes had elapsed from the beginning of the asphyxia up to this moment, then the anæsthesia had only disappeared so far that sprinkling the face with cold water disturbed the mouth, and the inhalation of spirits of hartshorn produced coughing. The child opened his eyes, which had a natural expression;

* Mr. Urich in Vienna (upon resuscitation in asphyxia from inhalation of chloroform or ether, Vienna, 1858, Gorold), has observed this phenomenon in two cases of asphyxia from chloroform, in which he succeeded in recalling to life by means of the methodical compression of the abdomen. He justly greeted them as signs of returning arterial circulation.

the countenance took a normal color, and the child began to cry. He was soon so far recovered that the extirpation of the tumor could be executed.

Immediately after the operation the child evinced clear consciousness, but went to sleep. When he awoke, an hour afterwards, he felt quite well. No further effects of the chloroform were manifested.

As far as I am informed, the case communicated here is the first in which faradisation of the diaphragm was successfully used in asphyxia from chloroform. In man, Mr. Flugo Fiemssen (Electricity in Medicine, Berlin, 1857, page 40), effected the artificial respiration, by means of the induction-current, in a case of asphyxia from carbonic oxide gas, which he promised to communicate in its details. From his preliminary notice, it appears that he excited not only the nervous phrenicus, but all of the plexus cervicalis and brachialis, in order to produce as perfect an extension of the thorax as possible. The artificial respiration was continued for more than twelve hours, at intervals of half to one hour, in which they alternated with other stimulants (sprinkling with ice water and friction of the body), and produced recovery. The part which faradisation of the diaphragm had in the recovery of this case, can therefore not be easily defined. This is, however, more possible in my case, in which the local phenomena, especially the elevation of the epigastric region and the hiccoughing inspiration placed beyond doubt the contraction of the diaphragm, produced by the induction-current. Whether, at the same time, the current excited the heart by the electro-motor applied at the neck, influencing besides the phrenic, also the sympathetic nerve, I am unable to determine. The circumstance that the contractions of the diaphragm were manifest before the radial pulse, speaks against such a combined action. It would only prove that at the time when the contractions of the diaphragm became manifest, the contraction of the heart was not yet intense enough to make the radial pulse sensible. But just on that account the influence of the induction-current upon the heart can here only be considered accessory, for also before this influence the heart had not entirely discontinued its contractions, though they could not be felt, else the boy could not have been recalled to life. As the respiratory motions occurred here sooner than the

radial pulse, we can not deny them a great part in the increase of the heart's energy. In a case of asphyxia from chloroform which I observed in 1851, together with Dr. Schulz, in Perleberg, during the extirpation of a carcinoma of the breast, and which I treated successfully by methodical compression of the abdomen, the radial pulse had returned about ten minutes before the spontaneous respiration. The two cases reported by Dr. Urich in the work mentioned above, were similar. Observations hitherto made on patients, and experiments on animals, prove that generally the radial pulse returns in persons recovering from asphyxia sooner than the respiration. (Compare Franz Hartman: Contribution to the literature upon the action of chloroform, Giessen, 1855; Lallemand, Recherches experimentales sur les moyens a employer contre les accidents determines par les inhalations de chloroforme, L'Union medicale, 1855, No. 9, 13). If now, on the other hand, in Otto Krause the reappearance of respiration preceded that of the radial pulse, the effect of the faradisation of the diaphragm, is so much the more evident and obtains its full claims, opposed to that produced by methodical compression. It is certainly the best to combine both, and thus to produce a strong expansion of the thorax by forcing the diaphragm downwards dynamically, and a contraction of the chest by forcing the diaphragm upwards mechanically, wherein, of course, the rhythm of normal respiration must be followed.

The question whether the application of electricity as a means for artificial sustenance of respiration in asphyxia from chloroform is more effective than the *blowing of air into the lungs*, has been started and discussed in 1855 in the Societe medicale d'emulation (vid l'Union medicale, 1855, No. 9, 13, 37, 38, 47, 62), the report of the committee took the negative of the question. Duchenne answered affirmatively, but it is not yet satisfactorily solved. As I shall return to it in another place, I shall only remark here, that if the apparatus for the application of electricity is not at hand, or if the physician is not sufficiently skilled in its use, the blowing of air into the lungs should be commenced as soon as possible after beginning of the methodical compression of the abdomen, and should be combined with the latter. But if the blowing of air into the lungs is to do the service, that it can do, it must by all means

be considered only as a substitute for inspiration, and should, therefore, be used only as a part of artificial respiration. As a substitute for inspiration, I can only then consider it, if atmospheric air is blown into the lungs. That a person occupied with an asphyxiated patient should blow in air expired by himself, can rationally not be approved. We must consider that the removal of air containing (much?) carbonic acid, so urgent in asphyxia, is favored only by diffusion; that this, however, not taking place between similar gases, requires the entrance of air containing (much?) oxygen The blowing in of air conaining (much?) carbonic acid gas can at most expand the pulmonary cells, and remove part of the chloroform gas from them. But this effect is not sufficient in combatting asphyxia. On the contrary, we need just here a more considerable supply of air containing (much ?) oxygen gas to the blood which is contained in the pulmonary cells, and which as long at least as life is not extinct, still circulates feebly, in order to free it of the chloroform and to deliver the nervous centres of this poison paralyzing them. For this purpose the air entering through the opened window is best suited.

Male catheters have been used for the purpose of blowing air into the lungs, introducing it over the epiglottis into the larynx. I consider this as unsuitable as the canula with a lateral opening, which is placed into the wind-pipe in tracheotomy. Both instruments have their opening laterally above the closed end, whilst the access and the egress of the air require an open end, and can only be impeded by a lateral opening. A tube open at both ends, similar to the male catheter in form and strength, which is pushed into the larynx over the epiglottis and is connected with a pair of small bellows, is the suitable apparatus for forcing air into the lungs. Of course, we must, in this, keep in view the quantity of air to be taken up by a common inspiration; and if this quantity has been blown in, must immediately imitate expiration by methodical compression of the abdomen. In order to allow the air to escape during this artificial expiration, an opening may be made in the end of the handles of the bellows, which opening can be easily closed with the finger on blowing the air in. Thus blowing in and forcing out the air alternately until, when the artificial breathing is interrupted by way of experiment, the spontaneous respiration is manifested.

It may occur, that in the attempt to blow air through the larynx, we make the unpleasant observation that the air regurgitates and does not pass the larynx. These cases have been explained by the supposition that the larynx was obstructed by mucus. However, this was never found to be the case in either human or animal cadavers after death, produced by the inhalation of chloroform. The supposition of a spasmodic closure of the glottis in these cases has just as little foundation; for if such were the case the stridor could not be absent, which has, however, not been perceived in the cases of asphyxia from chloroform hitherto observed. The regurgitation of the air blown into the larynx is probably produced by a movable tumor in or near the entrance of the larynx, which forms (sich umlagert) accidentally during the administration of the chloroform and closes the wind-pipe. Even the possibility of the existence of such a tumor should induce the physician to investigate carefully the larynx, especially by means of the laryngoscope before the administration of the chloroform. If he finds such a tumor, he will certainly prefer to operate without chloroform. If he has not used this precaution, he must as soon as the patient has ceased to breathe, without delay have recourse to tracheotomy, and make the artificial inspiration through the wound of the wind-pipe. Tracheotomy must, however, not by itself be considered as a means of resuscitation in asphyxia from chloroform. For in animals in which tracheotomy was made before the administration of chloroform, and where the inhalation was effected through a canula placed into the wound, asphyxia and death occurred in the same manner (in spite of tracheotomy) as in those that were not subjected to this operation before the inhalation of chloroform. For this reason alone tracheotomy should not be considered a means for resuscitation in asphyxia from chloroform. This must be made clear, so that we may not make a physician responsible for blowing air through the larynx without tracheotomy in an unsuccessfully treated case of chloroform-asphyxia. But it is evident that for a patient who is about to die from a closure of the larynx, tracheotomy is the indirect means of resuscitation, no matter whether such an accident happens to him during the administration of chloroform or otherwise.

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Physiological Considerations of Epileptic Attacks. By M. Foville. *Translated by* James S. Morel, M.D., *of Savannah, Ga., for the Semi-Monthly Medical News.*

III. A peripheric lesion of any kind, a tumor, foreign body, or cicatrix, in contact with a sensitive nervous fibre, is, for this reason, a cause of an excitation which is transmitted by it to the marrow. This nervous center reacts by determining the contraction of the muscles, animated by the motor fibres, which arise nearest the medullary insertion of the excited sensitive fibres—that is to say, of the muscles of the region which is the seat of the excited lesion.

The contraction can not go beyond these limits and constitute a cramp or a tic. But whether the excitation increases in intensity, whether the excitability of this nervous center itself be excited by the continuance of the excitation, or by any other cause, or for both of these reasons, the muscular contraction may invade a more or less extended region (prop. 7), the whole leg or arm, for example, if the starting point of the excitation is in the foot or in the hand.

The persistence of the same causes increasing still more the excitability of the spinal marrow, the convulsions may extend to the whole muscular system by reascending the whole series of the motor nerves.

The last attacked will be those at the base of the cranium, but their effects will also be the more important. It is indeed from the medulla oblongata and from the superior part of the spinal marrow that the nerves which supply the muscles of the respiratory apparatus have their origin.

The necessary result of the motor reaction of these nerves is

the contraction of all of these muscles, and thus hurries on asphyxia, which would be fatal if it was not interrupted by the alternations of spasm and relaxation which take place.

When the reflex force which gives rise to all of these convulsive phenomena ceases to act (and this may depend upon its exhaustion at an expense as violent, or to the marrow which is its seat, being modified by general asphyxia, so as no longer to present the conditions necessary for its action), the convulsions are arrested and the body falls into a coma, a result of the disturbances which the nervous centers have undergone.

Then, again, a peripheric lesion, by exciting a peripheric nerve, has terminated by bringing on general convulsions (prop. 8). What was at first but a cramp or contraction, has become a veritable attack of epilepsy, of which this cramp—this contraction—was the aura.

But at the same time that the convulsion becomes asphyxiant, the other symptoms, characteristic of a complete access, take place. How is this sudden loss of consciousness, a phenomenon not less important than the first, since it is always an element of the complete attack, and since it constitutes of itself a kind of attack, the vertigo, to be explained? It is much more serious by itself than the muscular convulsion, for this latter produces no hurtful consequence on the intellectual functions; the former, on the contrary, rapidly weakens and perverts them. It has always been observed that vertigo alone brings on derangement of the mind with as much, if not with more rapidity, than the complete attack.

This symptom yet remains unexplained, or, at least, none of the views hitherto advanced will stand the test of rigid examination. Very recently, Mr. Brown Sequard* has proposed a new interpretation of this phenomenon, a solution which, in truth, is only an hypothesis, but which appears to me to agree well enough with known physiological laws, and applies itself so happily to the explanation of ascertained pathological facts, as to inspire a lively interest, and elicit for it serious investigation.

At this time it is generally supposed by pathologists that the system of the great sympathetic nerve is not independent

* Researches on Epilepsy. Boston. 1857.

in its action, that each ganglion is not a small nervous center, but that the whole length of that cord draws from the spinal marrow, with which it communicates in many ways, the nervous influence, which, modified in these ganglions, acquires its speciality of action.

The recent works of M. M. Claude Bernard,* Buage, and Waller,† Brown Sequard‡ and Velpeau,§ have, in a very satisfactory manner, established the action of the filaments emanating from the superior cervical ganglion of the great sympathetic upon the circulatory system of the head.

The section of these filaments immediately brings on paralysis of the contractile coats of the arteries; immediate distension of these canals takes place, followed by congestion, redness, and increase of temperature in the organ to which they are distributed.

These effects are perceived on the whole half of the head on the side where the section was made, and, as the increase of temperature is of all the symptoms the most easily and rigorously appreciated, it is by it that a measurement of its action has been sought.

M. Claude Bernard has ascertained, further, that the change of temperature is not confined to the exterior, but takes place also in the interior of the cranium. The temperature of the central hemisphere of the side where the section was made was greater than that of the opposite one.‖

If, instead of cutting these fibres, they be excited, or else if, after having cut them, their peripheric end be excited by galvanism, for example, an opposite result is obtained—there is then contraction of all the arteries; thence expulsion of blood and consequently pallor and decrease of temperature. Knowing what happens in the first case, we ought to admit that these phenomena also take place in the interior as well as on the outside of the cranium.

What portions of the marrow are they which furnish their influx to the ganglions, whence emerge the filaments, holding

* Academie des Sciences, Seances du 7 Mars 1853. Societe de biologie seance du 7 et du 21 Decembre, 1853.

† Academie des Sciences, seance du 28. Fevrier, 1854.

‡ Academie des Sciences, seance du 16 Janvier, 1853.

§ Gazette Medicale, 1857.

‖ Memoires de la Societe de biologie. 1853.

thus under their sway the vascular system of the whole head, that of the brain as well as that of the face? They are precisely the medulla oblongata and the superior portion of the spinal marrow which have been seen causing the convulsive symptoms of the attack of epilepsy, by calling into play their reflex excitability.

If, after a peripheric excitation, these parts react, not only on the motor fibres, which originate directly in them, but also in the ganglions of the great sympathetic which are united to them, and by them on the motor filaments arising from these ganglions, every organ animated by these different nerves ought to contract at once. The arterial system of the head will then be found instantaneously deprived of blood, which is shown by the never failing pallor of the face at the beginning of the attack, and in the brain by the loss of consciousness. This hypothesis is not at all at variance with the grand law which controls the circulation in the cerebro-rachidian cavity—that is to say, the impossibility of a vacuum, and the necessity that there should always be an equal quantity of matter contained in this cavity. Indeed, the filaments of the great sympathetic nerve act specially on the small arteries, and the blood chased from these vessels by the contraction of their contractile coats, flows back to the base of the brain or to the venous sinuses. Then a momentary pallor of the grey substance of the hemispheres, and, consequently, a sort of syncope would take place. It is in this way, according to M. Brown Sequard, that the action beginning in the same portion of the cerebro-rachidian axis has under its control the two phenomena which characterize a complete attack of epilepsy, the loss of consciousness and the asphyxiating contraction of the respiratory muscles. In this way is explained the simultaneous appearance of both of these orders of symptoms. In this way the brain proper would be found exerting no influence in producing the paroxysm. Indeed, M. Brown Sequard brings on these paroxysms in Guinea pigs under certain conditions at will. He says that he has provoked these attacks, even after depriving these animals of their cerebrum and cerebellum.

The participation of the great sympathetic in the motor reaction due to the reflex power of the marrow, is also evident in other portions of this trunk. Besides the pallor of the surface,

it determines movements of the organs of organic life, borygmi eructations, vomitings, emission of urine and semen, (prop. 2).

To have passed in review all of the symptoms of an attack of epilepsy, there remains to be explained how the permanent contraction in the beginning, and which constitutes the tonic period of the convulsions, is replaced by alternations of spasm and relaxation—that is to say, by the clonic period.

Now what is this but a tonic or permanent convulsion?

According to Romberg* and the experiments of Weber,† the permanent contraction is the result not of a combined influence, but rather of a series of momentary influences succeeding each other, much like electric shocks, with such rapidity that each of the short contractions which take place is begun before the preceding one has ceased, in such a way that the muscle remains convulsed in so continuous a manner, that it is impossible, even with the microscope, to perceive any trembling or movement in it.

Doubtless, such is the nature of the permanent contraction which is observed in the beginning of an attack of epilepsy, and then, indeed,—thanks to the increased excitability of the reflex power,—the manifestations may also have as rapid succession. But, the effects of the asphyxia, caused by this permanent contraction, are felt in the organs contained in the cerebro-rachidian cavity, as well as in every other of the economy. The properties of the marrow thus asphyxiated ought to be altered or diminished. It is not, then, possible that so exaggerated an action should continue for a very long time. Hence these successive relaxations occurring, which interrupt the tonic contraction more and more frequently, becomes more and more distinct until it disappears entirely.

The more rapid the asphyxia, the more quickly would its action be felt over the marrow, and would render it incapable of reacting in such a way that the danger would be induced even by its excess. What happens then? The excitability exhausted by such an expenditure, is either no longer in a state to react under the influence of the excitation which has caused

* Lehrbuch der Nervenkrankheiten, Berlin, 1851, 2 abtheilung, p. 7.

† Wagner's Hand worterbuch fur physiologic, Mus Kilbewegung.

the attack, else the excitation itself was accidental and transitory, and is no longer produced.

In these cases the consequences of the attack once dissipated, nothing peculiar is manifested. The functions are successively re-established, and this will take place only at an undetermined period, sometimes regularly periodical, but after the return of the excitability, or by the production of new excitations of other attacks, they will be promoted. It may be, that even the conditions necessary for this, no longer present themselves, and then the symptoms will never be reproduced. But it is not always thus. It may happen that before the coma following the attack can be dissipated, the marrow disgorged of its black blood, which caused the asphyxia, is renewed in a state to react, and then of the exciting cause persists, a new attack will be produced afterwards. The same phenomenon may be repeated many times, and there may be a series of *subintrant* attacks, and attacks *imbricated*, according to the language of M. Professor Trousseau.* This is what he calls the paroxysm or diseased state. The number of these attacks may be considerable, a new one being reproduced as the preceding one ends, and death is the frequent termination of such paroxysms. It is in the *diseased state* that most epileptics perish who die of epilepsy.

It is very important to remark here, that in this state the interrupted state of the attacks is one of the results of asphyxia itself, in such a way that a paroxysm, however numerous the attacks may be which compose them, is, in reality, only one permanent attack, which is interrupted every time that the asphyxia which it brings on paralyzes the marrow, to begin again as soon as it is freed from the asphyxiating effect.†

Death, in these cases, may depend upon many causes. Sometimes it is directly brought on by asphyxia, which is carried beyond the limits compatible with life. In this case it comes on at the same moment of a removal of the paroxysm by the contraction of the respiratory muscles.

* Gazette des hospitaux. 1855.

† These considerations on the effect of asphyxia, under this circumstance, are confirmed anew by the communications recently made to the Academie des Sciences, by M. Brown Sequard, on the functions of the red and black blood in the economy. (Seance du 17 aott. 1857.) Seance 7 Dec. 1857.

Sometimes it may depend upon the exhaustion which the nervous system has undergone after so many series of discharges, if I may be allowed to compare it to an electric battery or a Leyden jar.

Then, again, the asphyxiant contraction is not instantaneously mortal, but it has been too prolonged. During the whole time that the respiration has been interrupted, the tissues have received only black blood. In these case, when even the convulsion ceases, the asphyxiant effects continue. The effect continues after the cause.*

The same thing, says M. Duclos, may be produced as a consequence of tracheotomy. The entrance of air is free, and respiration easy; but too prolonged contact of black blood with the organs of the economy, has already caused irreparable disorders in them. The operation, although permitting respiration, can not save life.

IV. In the foregoing pages, I have shown how the reflex power of the marrow can, in consequence of a peripheric excitation, bring on muscular reaction, at first local, then more extended, then at last general, at which time the medulla oblongata itself reacts.

But an excitation of this kind may provoke, at the very outset, the reaction of that portion of the cerebro-rachidian axis, without going through all the intermediate stages of the progressively extending convulsion, without producing, as a sequence, any muscular aura. In this case, either the excitation will be perceived (prop. 4), and the phenomena of the sensitive aura, the cool air which ascends almost to the head, will be observed, or else this perception may not have taken place, and the epileptic attack shall display itself without immediate prodrome, without any kind of aura.

Besides, whether immediate prodromes are or are not observed, there may have existed for some time, hours or days, an increase in the cerebro spinal excitability, in what has been called susceptibility, mobility, or nervous polarity. Before producing the epileptic attack, this exaltation of the excitability will show itself by general disturbances of innervation constituting those distant prodomes above alluded to.

* Duclas (these de 1847) Etudes cliniques sur les convulsions de 'lenfance.

Of whatever character the symptoms of an attack may be, when once declared, they always remain the same. The medulla oblongata always reacts at once through the motor fibres which emanate directly from it on the respiratory muscles, to cause the asphyxiating contraction, and through the fibres which it only animates immediately, on the arterial system of the encephalon, to produce loss of consciousness. But the kinds of excitations capable of inducing this reaction, is far from being the only one. Every cause necessary to call into play the intrinsic motor power of the marrow, may bring on an attack of epilepsy. Hence the frequency of these symptoms and the variability of the point of origin. The more nearly the roots of the irritated sensitive fibres may be connected to the medulla oblongata, the more easy would be the reaction through the motor nerves which arise from it (prop. 6). Epileptic convulsions frequently take place after excitations, which are conveyed on the terminal fibres of fifth pair of nerves.

Such are those causes so frequent among children during dentition, and in adults, in consequence of caries of the teeth.

Tissot* reports, according to Fahrans de Hilden, a case of epilepsy which continued so long as a foreign body introduced by accident in the ear remained there, and which was cured upon its removal from the organ.

Boerhaave saw a young man who had an attack every time he had a fit of laughter.†

Very recently, M. Legrand du Soulle, has published a case of a young girl who was cured of a very severe hysterical epilepsy, after the expulsion of the larvæ of insects lodged in the frontal sinuses.‡

M. Brown Sequard brings on attacks of epilepsy in Guinea pigs whenever he pleases, by making a partial section of the marrow which increases the reflex irritability, and then pinching the skin on their jaws.§

A case which is nearly allied to the foregoing, is that in which some grains of lead were retained in the integuments of

* Tracti de l'epilepsie, chap. 5, 32.

† Darwin, Zoonomia, t. 11, p. 117.

‡ Gazette hebdomadaire, 1855, No. 39.

§ Gazette Medicale, 1850.

the neck, and had been the cause of epileptiform attacks. In this case the excitation was transmitted to the bulb by the sensitive fibres of the first pair of spinal nerves.*

But it is not necessary that the excitation sent through the sensitive fibres should be inserted near the superior portion of the marrow. There is not a point of the external tegument, a lesion of which may not be capable of producing these symptoms. They may also be caused by lesions no longer superficial, but deeply seated in the limbs. Authors are full of facts of various kinds; Tissot and Portal, above the rest, report a great number.

Until now, I have spoken only of excitations transmitted to the marrow by the nerves of general sensibility. Those of organic life are a path just as frequently run over by these excitations, and this explains all sympathetic epilepsies arising from lesion of the digestive tube or abdominal organs, of all of those gastric epilepsies of the ancients.

This is the way in which, among the new born, the retention of the meconium, and in every stage of life, the presence of indigestable food in the intestines, of worms or foreign bodies, becomes the frequent cause of epileptiform symptoms.

It is the same of calculi of the liver or kidney, lesions of the spleen, of the ovaria, or of the testicles. The cure which J. Frank effected by castration, in a man who had become epileptic in consequence of a lesion of the testicle, where this organ was drawn up in each attack, also appears to me as not depending upon a happy chance succeeding an adventurous and culpable operation, but a proof of his rare practical sagacity.† And this is not destroyed by this allegation, that all operations, every disease, is capable of curing epilepsy, without there being any relation between the seat of this disease or this operation and the starting point of the attack. The circumstances thus invoked may have an influence on the intrinsic power of the marrow, and diminish the excitability of that organ, which escapes us. If such is their effect, they would be an indirect means of cure, and it is in this way that it may be explained how the attacks in epileptics may be suspended during the whole course of an acute disease, during the

* Portal ouvr. citi p. 156. Universar.
† J. Frank Praxis medicæ innoversa pracepta t. 1, sect. 3.

whole time necessary for the cure of a wound or of an operation. But it is not less true that an operation which shall result in the disappearance of the exciting cause itself, may be a more certain means of obtaining a permanent cure.

These attacks caused by excitations of the great sympathetic may also be preceded by an aura. M. Billod gives an interesting case of this kind.*

Can an excitation, transmitted by a nerve of special sense, be a cause of epilepsy? Without doubt. Van Sweiten, according to Shenkins, reports that a child suddenly startled by the sound of trumpets, was seized with an epileptic attack, of which he died in the space of ten hours.† M. Professor Piorry relates two cases where the attacks came on in consequence of visual impressions.‡ He concludes, then, that even if the aura is not observed, there nevertheless existed one, which might be a neuralgia of the optic nerve, ordinarily too rapidly reaching the brain to be perceived by the patient. This, doubtless, is a generalization too greatly exaggerated, but based upon well observed facts. The lesions of the nervous centers are also capable of causing epilepsy. Is it by increasing the reflex excitability of the marrow? This is what I can not answer, but I believe that it may depend upon one or the other of these reasons, according to these cases. Nothing is more common, indeed, than epileptiform attacks, symptomatic of an acute cerebral lesion, as encephalitis, abscess, contusion of the brain, or of chronic cerebral lesion, (cancer, tubercles, syphilitic tumor, general paralysis). The cases where the lesions of the marrow are the starting point of epileptic attacks, are most rare, but sometimes they do occur, and M. Brown Sequard furnishes an irrefutable example of it, in his beautiful experiment on the Guinea pigs.

I have not yet said any thing of *essential* epilepsy, which exists during the whole life, and where the cadaver reveals no lesion capable of explaining the problem. This is most difficult. However, when it is remembered that impressions purely moral and intellectual—impressions which are known

* Memoire cite p. 389.

† Shenkins, observ. medic. lib. 1. p. 100, cite pur Van Sweiten comm. in aph. 1073.

‡ Clinique medicale, de la pitie. p. 321, 326. 1833.

to have no mutual changes in the nervous centers which we can see, present so many physiological manifestations of intrinsic motor power of the marrow, there is less room to be astonished that they may be capable also of producing pathological ones. It may, then, be understood that epilepsy depends upon cerebral changes as transient, as devoid of cadaveric traces as those which determine all the voluntary and involuntary movements. These modifications frequently result in increased excitability of the medulla oblongata.

If the collection of observations of *essential* epilepsy be examined, particularly those of M. M. Bruchet and Cazauvielli,* and those of Moreau, (of Truis),† we are struck with the great number of patients, frequently hereditarily predisposed, whose first attack was in consequence of fright.

Sometimes this emotion acts as an exciting cause, and then the attack immediately declares itself; but most frequently this does not take place for several days after, and the interval which separates the fright of the attack is then marked by various nervous disturbances. In this case the moral modification following the fright, brings on an increasing exaltation of the excitability, an exaltation which, at a given moment, may be the consequence of a determinate cause impossible to be discovered, shall have made the attack burst out. This excitability seems to be maintained and exalted by every one of these manifestations (prop. 10), and here is the way in which the disease becomes chronic, and how the attacks become more and more distant. Some circumstance may momentarily diminish this susceptibility of the marrow, and we shall have an interruption or a longer interval between the attacks; but this is only a temporary arrest of the progress of the disease—the symptoms soon return with as much intensity and as frequently as ever. In fact, it is known that the permanent cure of an essential epilepsy is altogether impossible, or, at least, a result of very rare occurrence forms the great exception.

I must now return, for a moment, to the consideration of the question of the aura. Can it precede attacks of essential epilepsy, or a symptomatic one dependent upon cerebral disease? Yes, doubtless, and science furnishes irrefutable examples of

* Archives gen, de med; t. ix 1st serie, Annee, 1815.
† Memoire cite.

them. Many ancient and modern authors, also, have rested on these facts, and denied that the aura could be caused by a peripheric excitation. Lepois,* Willis,† Demoore,‡ are among the first. M. M. Moreau, (de Tours),§ Hupen,‖ of our own times, have taken this position. They are, doubtless, right in certain cases, and particularly in those upon which they support themselves. It is possible, too, that the portion of the brain primarily affected by the moral or physical cause of the attack may be the seat of modifications which cause the patient to experience sensations in the organs which depend most directly on this portion of the encephalon. The sensitive aura will then be observed; these effects are analogous to the hallucinations of special sense among lunatics, to the illusions of general sensibility among those whose limbs have been amputated. The same part of the brain thus affected may also give rise to convulsive movements in a limited region of the body before determining the reaction of the medulla oblongata, and then a muscular aura will be manifested. Besides, do we not see in parts of the encephalon attacked with ramollissement producing in distant portions of the body, at first congestions, formications, and then contractions?

It is, then, to the excitation confined to a certain portion of the brain that the motor auras, consisting in perfect acts of locomotion, should be connected, for the experiments of modern physiology have demonstrated that the lesions of certain parts can bring on movements of translation, both backwards and forwards, or movements of rotation, like those which sometimes precede an attack of epilepsy.

What conclusion shall we draw from all these facts? That the motor and sensitive aura may manifest themselves in essential or symptomatic epilepsies through a cerebral lesion, as well as those which depend upon a peripheric lesion; but we must not, on this account, reject its existence in this last case. I have not yet enumerated all of the causes capable of producing the reaction of the medulla oblongata; the more

* De prœteritis hactenus morbis, etc 1809.

† Pathologia cerebri et nervosi generis specimen, London, 1678.

‡ Pathologia cerebri chad. 13, sec. 37 : cite par Tissot.

§ Memoire cite.

‖ Du prognostic et du traitement curatif de l'epilepsie, p. 419, et suiv.

general lesions remain to be noticed. I wish to say something of certain alterations of the liquids of the body.

Epilepsy may depend upon a deficiency of proportion in the absolute quantity of the blood. Maisonneuve* and Portal† have described what they call plethoric epilepsy. Epileptiform convulsions are not rare as a sequence to excessive hemorrhages in man and animals. A very slight loss of blood may induce it in subjects whose excitability is very great. Fabricius de Helden reports a very interesting example of this kind.‡

At other times epilepsy depends upon modifications in the elements of the blood. Such are the accidents on which has recently been based the theory of uremia.§ It is of little importance that in these cases there is accumulation of urea or the formation of carbonate of ammonia in the blood. It is always to a change of the composition of this humor that the epileptiform attacks of albuminuria are due—attacks which may reveal themselves at a slightly advanced stage of the disease, and it is to the same cause that it is necessary, in a great number of cases, to refer the eclampsia of childbed. Other alterations of the humors may have the same effects. I do not know if any one has them in glucosuria or leucothemia, but, very recently M. Charcat‖ pointed them out as a complication of an alteration of the newly described elements of the blood: *melanhemia*. It is frequently the same in paludinal cachexia.

Again: It is, perhaps, by the modifications which they produce on the blood, that certain poisons cause epilepsy. But in these cases the causes must be very great. In certain cases the poisoning is chronic, and the poisons may act on the nervous centers as local excitants—*e. g.*, lead, mercury. In other cases they are acute, and the poisoning substance may then be a direct excitant of the intestinal tube—*e. g.*, water-hemlock, belladonna, etc.

Have morbid poisons a similar effect? Convulsions occur frequently in eruptive diseases, particularly among infants, and Sydenham considered them as favorable when they take place

* Memoire cite, p. 105.
† Auvr. cite, p. 214.
‡ Centuri 4. observ. 22.
§ Teissier, de l'uremie (Thise de 1856.)
‖ Gazette Hebdomodaire, 1857, art Milantremie.

before the eruption.* Do they depend upon an alteration of the humors? It is very possible, but we must remember how readily excitations, carried to the most slender of the nervous terminations, act by provoking reflex effects (prop. 8), and perhaps in these cases the fluxion which is directed to the skin, may itself act as a peripheric excitant. Be this as it may, the humoral theory of epilepsy is applicable to certain cases. Todd, in proposing it for all, was wrong only in wishing to generalize a particular fact.

V. Until now, I have only considered the complete attacks of epilepsy, the *grand mal.* But how shall we define the partial or the imperfect attacks? The explanation is easy in those cases which consist only of convulsive phenomena. We have seen how a peripheric lesion brings on a motor reaction, which, at first local, is afterwards extended to the neighboring portions of the marrow, and degenerates into a complete attack of epilepsy, when it has reached the medulla oblongata. But a like extension happens only after some time, and the convulsions may be arrested at each of the intermediate degrees. There may be seen successively in the same individual the whole series of partial attacks, those in which the convulsive symptom alone exists unattended with loss of consciousness. In the same way the medulla oblongata may vary in its energy of reaction, by being under the influence of direct excitement. The contractions which would follow would then pass through all the intermediate phases between the most violent attack of epilepsy and the simple tremor.

Lastly. At other times the reaction may be extended only to the circulation, as it was displayed just now on the muscles of relation, and then we have vertigo and giddiness. Without going further into details, it will be readily understood that the decrease of the reaction by them, the two orders of organs, depend upon the condition of the marrow, or, rather, the absence of reaction in one of them, may explain the partial attack of every kind.

Upon what do these various manifestations depend upon? Upon the degree of the excitability of one part, and upon the kind of excitation in the other? It is possible that these exercise an elective influence upon the reaction which they pro-

* Section 3, chap. ii.

voke. External excitations seem to have a particular tendency to bring on, at first, attacks simply of a convulsive character. Are cerebral excitations, either moral or physical, more apt to cause at first a purely cerebral reaction, or vertigo? Many facts may induce such a supposition, but this is a class of considerations too speculative in their character for present discussion.

In this way of regarding the partial manifestations of the two orders of symptoms, we see how many phenomena may be connected to, and considered as, incomplete paroxysms of epilepsy. It possesses, also, real danger, for all of these varied manifestations refuse to enter within the bounds of a definition, and much latitude should be given to each in the estimate they place upon such or such an account.

But, by the side of that inconvenience, there are many important advantages. The mechanism of incomplete attacks thus understood, appears to me of a nature, above all others, which may easily bring into harmony the diverging opinions which still prevail upon the question of the identity of the symptoms described by different authors, under the terms eclampsia, convulsions, and epilepsy of infants.

If we consult the writings of Sauvage, Pinel, Duges, Caupron, Billard, of M. Brachet, M. Barrier, M. Duclas (thesis 1847), the articles, Epilepsy in the Compendium of Medicine, Eclampsia in the Dictionaire de Medicine by M. M. Blache and Geursant, the clinical lectures of Trousseau, and, above all, the excellent chapter in the work of M. M. Rilliet and Barthez upon convulsions, we will easily discover that on one point at least all these authors nearly agree, to-wit: that in its most serious and intense manifestations, the attack of eclampsia or convulsion of infants presents no character which distinguishes it from an attack of epilepsy in the adult. But from this point the divergences begin, and as the convulsions are far from always appearing with an arrangement of symptoms so complete, as above all they are frequently confined to one or two members of the body, or else are more general—as they last much longer than the convulsive period of a veritable attack of epilepsy, and are not, as it is, accompanied by loss of consciousness, nor followed by coma. Some of these authors see in milder forms an accident *very different* from the first, associated

by them with epilepsy. The others, on the contrary, consider all of these accidents as divers degrees of *one* and *the same* disease, differing frome pilepsy, a disease for which they recognize a specific individuality, and to which they assign a particular position in the nosological classification.

These two methods of viewing this subject, result either in separating the accidents, which, although varying in intensity, are in reality of the same kind, and frequently replace each other; for the same infant will be often attacked by convulsions limited to one member and terminating in the most complete attack, after it has been arrested at many of the intermediate forms; or in disturbing the group of an affection, constituted by their totality, which is known to be identical with them from the most intense manifestations.

May not these two rocks be shunned in the following way: Since there is no possible difference between the complete attack of epilepsy and that of complete eclampsia, let us recognize the two orders of accidents, and consider them as the same symptoms, under circumstances differing more or less. Then carry the analogy further, by regarding the less general symptoms and aura as limited if you can, as the partial attacks which are observed in the epileptics, depending, like them, upon the diminution of one or the other, or even of one and the other of both orders of phenomena which characterize the complete attack, or else depending upon the absolute absence of one of them. The reaction of only a portion of the marrow will easily explain the cases in which the convulsions occupy the four members and a portion of the trunk, even though they are repeated for a long time, at very close intervals, or even if they continue without interruption, and are neither accompanied by loss of consciousness, nor by coma, nor the apoplectic state.

It is true, that it would be difficult to embrace all of these various forms within the limits of a brief and specific definition, but to overcome this difficulty the natural connection of similar symptoms should be respected, and the then embarrassment and confusion inseparable from an arbitrary and artificial division will be avoided.

VI. Marshall Hall, in his interesting investigations on the

reflex power,* considered the phenomena of epilepsy as depending upon the influence of the medulla oblongata. I concur entirely, as has been seen, with this opinion; but I can not agree with this author in the estimate he places upon that influence. Remarking the predilection of this part of the cerebro-rachidian axis to act on the muscles of the neck, he gives to the contraction of these an exaggerated importance. According to him the trachelism (a term used by him to denote spasms of the muscles of the neck), determines the swelling and redness of the neck and face; laryngismus causing the occlusion of the glottis, induces asphyxia, and with it cerebro-rachidian congestion, from which result all of the cerebral and spinal phenomena of epilepsy, vertigo, loss of consciousness, delirium, and apoplexy. Thus, loss of consciousness in the incomplete attack (le pelit mal), as well as in the complete attack, would follow the asphyxia, while the last named symptom is the result of laryngismus—that is to say, to the closing of the glottis by spasm of the muscles of the larynx. The remedy is then very easy; open a passage for the air which the muscles can not close, and all of these accidents would be overcome. Trachelism fulfills this indication. You will not cure the epilepsy by it, but you will prevent the attack, you divest it of its dangers. It is sufficient only to expose this theory to show how false and dangerous it is. A loss of consciousness is primitive, it alone constitutes the vertigo, and in the complete attack (the grand mal), it appears at the very outset. It can not then be caused by asphyxia. As to this last symptom, it does not depend, in any way, upon the occlusion of the glottis. The vocal cords are, doubtless, contracted during the tonic period of the attack. Anatomical analogy would indicate this, the initial cry proves it, but this is a symptom of but small importance. Besides, their approximation can only result in closing the membranous portion of the glottis. The cartilaginous glottis is always open, and leaves a space sufficient to prevent asphyxia, if the respiratory movements continued; but the great cause of asphyxia, which M. Hall did not see, and which destroys all of the importance he attached to closure of the glottis, *is the permanent contraction of the respiratory muscles,*

* Apercu du system spinal, Paris, 1855.

and the immobility of the thoracic walls. What can tracheotomy do in such a case?

If I have clearly shown how various, in my view, the causes are, capable of producing epilepsy, it will readily be conceived that I attribute to the attack only the value of a symptom: consequently, I do not think it is against it that the treatment should be directed.

Nothing appears to me so far from a true mode of action as to apply the same empirical treatment to all epilepsies, whether it be oxyde of zinc or powdered roasted mole, the cotylidon umbilicus, or the dust of the human skull. The principal indication to which every effort should be directed, is the suppression of the exciting cause which produced the attacks. The investigation of the cause will be difficult and tedious, seeing the innumerable variety of circumstances capable of acting as local or general excitants. But I doubt not that if serious efforts were made with that view, with courage and perseverance, they should be often crowned with success. It will then be seen that many epileptics which were considered essential and incurable, are, in reality, symptomatic and susceptible of cure. I then insist upon the necessity of this research, without going further into detail. I will only point out the importance these phenomena possess when they exist, and all that can be gleaned from them by a well informed man.

But if all of these effects prove fruitless, if the epilepsy is truly essential, what must be done? Hygiene and empirical means must be resorted to, the first, particularly, will be of the most value, and will have to be rigidly employed. Every means should be used to allay nervous irritability, and prevent excitement of all kinds. Frequently a residence in the country is most favorable to the attainment of this object, daily physical exercise, and a light and unstimulating diet should be prescribed, taking care to maintain perfect regularity in the functions of nutrition and excretion. The functions of the skin should be kept up by regular and careful application of water; finally, the greatest care should be taken to banish from the patient all causes likly to produce intellectual or moral disturbances.

It is by pursuing this method perseveringly and regularly for a long time that some chance will be attained for a real

improvement, perhaps even a cure. In connection with this treatment, a resort may be had to the many medicines called anti-epileptic. But I may here refer to the conviction to which physicians of large experience in this disease have arrived, in reference to their use. Among others, I will cite the learned preceptor, under whom I studied epilepsy at the Salpetriere, M. Lelut. He says that all of these preparations regarded as panaceas by the inventors of them, effect only a delay of the attacks. This amelioration, although but of short duration, should be an advantage not to be neglected, if we did not ordinarily see the attacks momentarily interrupted, return again with more frequency, and more aggravated than ever, which too often more than compensates the temporary benefits derived from the treatment.

VII. The principal views I have presented may be summed up in the following conclusions:

1. Convulsive and apoplectic attacks, designated under various names of epileptic attack, (*grand mal*), eclampsia, epileptiform, are identical in their symptoms.

2. The characteristic symptoms of these attacks are manifestations of the intrinsic motor faculty of the medulla oblongata (reflex motor power).

3. The convulsive phenomena of epileptic attacks produce asphyxia, and this, in its turn, results in suspension of the convulsive phenomena, paralyzing, for the moment, the medulla oblongata.

4. All excitants capable of producing reflex motion, may cause an attack of epilepsy. It will so much the more readily produce it, as it may be displayed on organs most apt to arouse reaction of the medulla oblongata, and as the excitability of the medulla oblongata itself may be more exalted.

5. In the treatment of epilepsy, the principal indication is to suppress the exciting cause of the attack. If this is impossible, an effort should be made to diminish the excitability of the medulla oblongata.

At a meeting of the French Academy of Sciences, held the 30th of May, Prof. Virchow, of Berlin, was, by a majority of votes, elected a corresponding member, in the place of the late Dr. Marshall Hall.—*Edinburg Medical News.*

Pharmaceutical Department.

By T. E. JENKINS, Pharmaceutist.

Wild Cherry Leaf Water.—From a notice of the distilled water of the wild cherry leaf, by W. Procter, Jr., in the American Journal of Pharmacy, some practitioners have been induced to try the preparation in their own practice.

Not expecting much from the experiment, on account of the lateness of the season, and the small amount of activity probably existing in the leaf at this time of the year, we, however, gathered the leaves about the first of October, and after thoroughly bruising and mixing them with an equal weight of water, they were introduced into a still with properly arranged refrigerators, and after allowing the whole to stand twenty-four hours, the fluid was drawn over at a gentle heat until the amount passed equalled half the weight of the leaves employed.

The distilled water obtained was slightly milky, and possessed, in a great degree, the odor and taste of the wild cherry leaf. It gave on analysis .0238 per cent. of anhydrous hydrocyanic acid, which makes 84 grains of this distilled water, equal 1 grain of the *acid hydrocyanic dilut:* of the pharmacopœia.

The second trial was made several days afterwards, and the resulting water contained a little less prussic acid per cent. than the first.

It has been used by several physicians, who speak of it favorably; and on account of the abundance and accessibility of this leaf, it should attract the attention of the pharmaceutist and doctor, since it yields a valuable and active medicament, in a pleasant and agreeable form, and may by proper attention be made to supply the place of the foreign "Aqua Lauro Cerasi," which is often factitious, and almost always of unknown strength, and consequently unreliable.

Next year we shall distil various lots of this water at different periods of growth of the foliage, and by a close examination of the product, be enabled to state with some degree of certainty the best time for submitting the leaves to distillation, so as to insure the most active and uniform preparation.

Preserving Cider.—Let the cider from sour apples (from sound and selected fruit), ferment from one to three weeks, as the weather is warm or cool. When it has attained to lively fermentation, add to each gallon one-quarter of an ounce of sulphite of lime. Rub this powder with a little of the cider until it is thoroughly and uniformly mixed, and add it to the barrel of fermenting liquid. Agitate briskly for a few minutes, and let the cider settle. The fermentation will cease at once.

When, after a few days, the cider has become clear, draw off and bottle carefully, or remove the sediment and return to the original vessel. If loosely corked, or kept in a barrel on draught, it will retain its taste as a still cider. If preserved in bottles carefully corked, which is better, it will become a sparkling cider, and may be kept indefinitely long.

Assafœtida and Aloes in Ascarides.—Dr. Nathaniel Smith states that, during a practice of more than forty years, he has never known assafœtida and aloes to fail of an immediate cure. He has usually employed the tincture, sometimes clearing out the bowels first by a smart purgative.

The finer qualities of gelatine are made from ivory raspings and the bones and tendons of animals.

Counter-poisoning.—An exchange paper says, that a man who was bitten by a copper-head snake, in Rockbridge county, Virginia, died in twenty-four hours. A quart of whisky was administered to him, and the attending physicians attributed his death to the *remedy*.

Patent Medicines.—In the year ending the 31st March last, the duty on patent medicines in England amounted to 43,090*l.* 14*s.* 1½*d.*

Antiperiodic Properties of the Hypophosphite of Quinia. By Archie B. Cook, M.D., *Demonstrator of Anatomy, University of Louisville.*

During the early part of September, I prescribed the hypophosphite of quinia in five cases of intermittent fever, in all of which the medicine acted promptly and efficiently. It was exhibited in pilular form, each pill containing two grains of the salt, with q. s. of the ext. gentian to make mass. In each case twenty grains were exhibited during the intermission, the quantity taken at each dose, and the intervals between the doses being regulated by the length of the intermission. In all the cases I endeavored to have the whole quantity taken, at least two hours previous to the access of the paroxysms. The same quantity (20 grs.), was exhibited on the next or second day following, as the case proved to be of the quotidian or tertian type; after which five grains were given daily for four or five days. From two to three weeks have now elapsed without a recurrence of chills in any of the cases treated.

Three of the patients were interrogated with reference to the head symptoms, and in no instance was any allusion made to those disagreeable sensations (as buzzing and singing in the ears), which so frequently follow the administration of the sulphate in even small doses.

I used the remedy uncombined, to test its properties as an individual antiperiodic. From what we know of the action of the sulphate of quinia, in combination with opium, or some of its various preparations, we would infer that a small quantity of the hypophosphite in similar combination, would interrupt the periodicity of the disease.

Anæsthesia of Bees.—Chloroform has been effectually used in removing honey from bee-hives in England and in this country.

The vapor of chloroform is blown into the hive until the bees are asleep, when they can be handled with safety, and in a few hours they are again as lively and busy as ever.

The cholera in Germany, the Lancet says, is still increasing. In some villages half the inhabitants have been carried off. Agricultural operations have been suspended, and the cattle let loose in the fields, there being no one to attend to them.

Editorial Department.

GLEANINGS FROM FOREIGN JOURNALS.

The Man Midwife and the Royal Abortion.—The same Tuesday night, May 12th, 1629, about twelve of the clock, did Queen Mary fall in labor of her first child, and was delivered at Greenwich about four of the clock next morning of a son, which lived about an hour, and was baptized by Dr. Wilson, one of the king's chaplains, and named Charles. He was born in the seveth month, near upon eight weeks before the due time, yet had nails and hair; and might, in all probability, have lived, had he not been turned in the womb, and so spoiled by the man midwife, in the very birth, whom the queen was forced to use for her own safety. This mischief happened to the queen and royal babe in her return from London the day foregoing by water, where she had been at mass; for the boat she was in shooting the bridge, was suddenly lifted up so high with the water, as, in the swift and sudden falling again thereof, she was disseated, and fell down on the bottom of the boat; by which it was conceived and dislocated in her womb.—*Life of Sir Simon D'Ewes.*

Accouchement of Madame de Bourbon.—"Her labor was so difficult that it was feared it would be necessary to deliver the child by force. The child was, in fact, born dying. To reanimate it, it was placed in linen soaked in spirits of wine. No one knows how, but the spirits took fire. The women all rushed away terrified. The accoucheur, however, assisted well, and the child's life was saved. It is thought he will live." Thus wrote on August 5, 1772, Madame de Deffand, of the birth of a child, who in 1804 ended his career in the ditches of Vincennes, as Duc d'Enghien!

Curious Denial of an Established Fact by a Great Authority.—"For a long time," M. Trousseau tells the academy, "I have heard spoken of—I have myself heard—and have believed in a *pleuritic friction sound;* but now daily I lose my confidence in it. I search for it in the patients under my charge,

who are attacked with commencing pleurisy, and pleuro pneumonia; I beg my colleages at the Hotel Dieu to inform me when they themselves notice its presence in any of their patients; and now, during four years, I have only once heard a true *bruit de frottement.* This is what I find: In chronic catarrh, in pleurisy and pneumonia in its period of resolution, I find, under certain circumstances, the peculiar sound called *bruit de frottement.* In the greatest number of these cases, this *bruit* appears to me to be a sonorous *rale*, which ceases when the patient coughs." M. Trousseau appeals to his colleagues at the academy, but his colleagues on this point all differ from him.

Tannin in Albuminous Anasarca.—The following are M. Garnier's conclusions:

1. Tannin in the dose of 3½ to 3j. per diem cures anasarca or œdema when passively developed and coinciding with albuminous urine.
2. Its curative action is manifested by the abundant flow of urine, which gradually assumes its normal characters by transpiration, easy alvine evacuations, recovery of appetite, etc.
3. These signs of its action appear after the second day of its administration.
4. Given in solution of doses of from gr. iij. to gr. vij. at a time, it produces no disturbance of the digestive organs.
5. Its action seems to be primarily exerted on the fluids of the economy, coagulating and plastifying their albuminous principles. Its action on the solids seems to be consecutive, tonic, and astringent.—*Med. Times and Gazette.*

Cancer Hospital.—The ceremony of laying the foundation stone of the new hospital for cancer at Brompton, nearly opposite the consumption hospital, was performed on May 30, by Miss Burdett Coutts, in the presence of a very numerous company, including the Bishop of London, the Ven. Archdeacon Sinclair, and several other clergymen and medical gentlemen.

Treatment of Nervous Headache by the Hydrochlorate of Ammonia. By Dr. A. Barralier.—The author recommends the hydrochlorate of ammonia as the best therapeutic agent in cases of nervous headache, and especially in idiopathic cephalalgia and migraine. For upwards of three years he has employed it with success 202 times out of 259. The salt is administered in the form of potion: distilled or mint water, 60

grammes; hydrochlorate of ammonia, 3 grammes; sirup of orange peel, 25 grammes; taken at three doses at half an hour's interval. These doses do not produce any evident physiological effects in the healthy condition; but, when administered during a paroxyism of nervous cephalalgia, their effect is manifested with great promptitude. Generally, after the first dose, pain abates and the pulse rises, and a gentle perspiration relieves the dryness of the skin. The influence on the circulation is so great that the pulsations, which were under 50 during the paroxysms, rise above seventy after the first dose. The headache, which is calmed by the first dose, diminishes and entirely disappears during the second and third. An important circumstance is, that the sal-ammoniac does not develop its curative action except when the pain is at its hight; at the commencement of an attack, the potion has only a slight effect, but when the sufferings of the patient are very intense, the medicine acts with wonderful promptitude. Besides the temporary relief, it was observed that, in cases of headache returning in periodical paroxysm several times a month, the intervals gradually became longer, the attacks diminished in intensity, and ended by disappearing completely, after having been several times arrested by the ammoniacal potion. To obtain success, however, it must be administered in certain cases, and according to precise indications. The results of the author's observations are: that the potion of hydrochlorate of ammonia has almost constantly dispelled the attacks of idiopathic hemicrania or migraine, and of migraine succeeding menstruation more abundant than usual; it has no effect in relieving attacks of hemicrania depending on irregular or suppressed menstruation; it has given pretty good results in cranial pains depending on functional disorder of the stomach, and in accidental nervous cephalalgia; and it has been successful in relieving headaches consequent on repeated attacks of intermittent fever, those occurring in the decline of low fevers, and in the period of irritation in typhus.—*Bulletin Gen. de Therapeutique.*

Willebrand on the Secale Cornutum in Disturbance of the Accommodation Power of the Eyes.—When local hyperæmia is dependent upon a laxity of the walls of the blood vessels, advantage attends, Professor Willebrand of Helsingfors, states, the employment of secale cornutum. He was induced to use it in these cases by the expectation that a means which acts so specifically upon the unstriped uterine muscular fibre must excite some power over the analogous structure of the arteries, and which its hæmostatic action proves, in fact, that it does.

During his investigations he soon became struck with the fact that the heart of persons employing it soon underwent contraction in all its dimensions, and that even within the first twenty-four hours—a circumstance which he has frequently verified since. The first case that came under his care was an example of exopthalmos, accompanied with enlargement of the thyroid gland and hypertrophy of the heart. After a few weeks' use of the secale the hypertrophy of the heart and thyroid, as well as the projection of the eye, much diminished. The patient, however, left off the medicine, and the exopthalmos returned worse than ever. Since that period he has employed the secale in various cases in which increasing the contractility of the muscles of the blood vessels or other tissues seemed to be indicated. It was found of special advantage in a disturbed state of the accommodation power of the eye, especially induced by overtaxing the organ on small objects with an insufficient amount of light. Children from some of the schools have furnished the author with many instances, and they have always been relieved by the secale. He relates a case in which impaired vision was always brought on by sowing or reading, and wherein the signs of some amount of chronic congestion were visible. Relief rapidly followed, and when the affection recurred some months after, it was as speedily relieved. He has also found the secale of great use in several cases of acute or chronic inflammation of the eye, and especially in blepharitis and the pustular conjunctivitis of children, the case proving much more rapid, and relapse being much less rare, than when local means alone are relied upon. No benefit has been derived from it in granular conjunctivitis and trachoma.

Proceeding upon the theory of its stimulant action upon the vaso-motoric nerves, the author has extended the employment of the secale to other local disturbances of the economy; and, as already observed, he has had frequent occasions of observing its transitory influence in hypertrophy of the heart, without having any reason to believe that it is of any permanent utility in affections of this organ, the heart always returning to its former size soon after the use of the secale has ceased. In many cases of both chronic and acute hyperæmia it has proved of great service, and especially in cases of galactorrhea, and in indurations, tumefactions, and catarrhal affections of the uterus. Also, it has been very useful in enlarged spleen from intermittent fever, and when large doses of quinine have failed. It is especially indicated in the cases of relapsing intermittent depending upon enlarged spleen. In erysipelatous affections, it has often done good service applied externally as a cataplasm. The author formerly gave ten grains ter die, but now gives

but five, combining it with magnesia, or, when chlorosis is present, with iron.—*British and For. Chirur. Review.* (From Graefe's Arch. fur Ophthalmologie.)

Dr. Jenner.—A statue of Dr. Jenner, by M. Eugene Paul, has just been cast in bronze, and set up temporarily opposite the river front of the Louvre.

Fatal Peritonitis after Division of Imperforate Hymen from Retention of Menses. (*Letter from E. J. Tilt, M.D., L.R.C.P.*

Sir:

The interesting remarks of Mr. Paget, of Leicester, on the possible occurrence of fatal peritonitis, in cases of retention of menstruation, notwithstanding the division of the hymen, brings to my recollection a similar case which occurred in the practice of Sir B. Brodie, and which is briefly related in the 27th volume of the London Medical Gazette. Sir B. Brodie, stated to the Royal Medical and Chirurgical Society, that he had punctured the hymen for retention of menses in a patient at St. George's Hospital, and that nevertheless the patient died of peritonitis. The abdomen was found to contain a large quantity of menstrual blood, without any rupture of the Fallopian tubes, or of the uterus; a circumstance which could not be explained without admitting "that the blood had passed from the uterus backwards through the Fallopian tubes." This regurgitation of the menstrual blood into the peritoneal cavity, without any rupture of the Fallopian tubes, followed by fatal peritonitis, notwithstanding the partial relief afforded by the passing of blood by the vagina, are the salient points of the 69th case related at page 255 of my work on Diseases of Women (Second Edition).

In this interesting case, which occurred in the hospital practice of my friend, Dr. Bernutz, of Paris, the retention of menstruation was caused, not by imperforate hymen, but by disease of the womb. I am, etc.,

E. J. Tilt.

11, *York Street, Portman Square, Aug.*, 1859.

We are indebted to the kindness of Messrs. Blanchard & Lea for Gross' System of Surgery in two large, well bound and beautifully illustrated volumes. Also, Gray's Anatomy in one large octavo volume, bound in muslin and elegantly printed and illustrated. Also, the seventh edition of Fowne's Chemisty.

These works have just come to hand, and we must defer

more extended notices to a future number. For the first, however, on the list, the simple announcement of its arrival will suffice to the numerous friends of its author. The last has a reputation already established as a standard work, and the second named comes highly recommended by reliable critics. We observe that it possesses one feature which will commend it to every student, to-wit, muscles, arteries, etc., have their names printed over them in the plates illustrating them. Copies of these works may be had of Morton & Griswold, through whose courtesy they have been forwarded to us.

A Word of Explanation.—In our last number we copied from the Louisville *Semi-Monthly Medical News* a little "take off," headed "Sensation Answers to Correspondents." The closing paragraph of that quotation offers "$5 per number for any copies of our Journal issued in 1857"—the point of which is, that the journal *had no existence* at that time. Notwithstanding, we think, any reader with two ordinary eyes should see that this is given as a quotation, still we have had, already, offers from several friends to supply numbers of the *Observer* for 1857. Do our friends take, without any further comment? —*Cincinnati Lancet and Observer.*

The absence of one editor, and the indisposition of the other, permitted many typographical errors to remain uncorrected in our last issue.

Dr. H. P. Ayres, of Fort Wayne, Indiana, is chairman of a committee to report at the next meeting of the American Medical Association, upon "Idiotic and Imbecile Education."

Our readers will confer a favor upon the reporter and his cause by communicating to him all facts within their reach upon the subject committed to him, as well as causes, either of parental origin or post natal, which may appear to have produced the mental defect.

Diptheria is quite prevalent and fatal in some parts of Indiana. We will, in our next number, give our readers extended reports upon the character and progress of this malady, both in Europe and this country.

University of Louisville.—The numerous friends to this old, storm-tried institution, will be gratified to learn that the class who have already assembled is more than twice as large as it was at the same period last session. Many circumstances, aside from the energy and ability of the faculty, have contributed to this result, and we sincerely trust that similar causes may continue to act and react, for their fruits may be seen in regular attendance at the lecture-rooms; and those interested in the prosperity of Louisville, or the cause of medical education, or a University which is an honor to the city, may learn from the gentlemanly and dignified bearing of the class now present, that it is composed of material which will reflect credit upon the Institution and its patrons.

It may not be always safe to assume, from the direction in which a man is walking, the point to which he is going;—nevertheless, he seldom walks backward, except to his own destruction. See Psalms i, 1.

Virchow's Cellular Pathology.—The object of Dr. Virchow's work on Cellular Pathology, is to establish a new foundation for the creation of a philosophical medicine. Dr. Virchow desires to put an end to all the one-sided theories now in vogue—to the theories of the humorist and the solidist; to the crasis, exudation, and blastema, iatro-chemical, and iatro-mechanical, theories. In the place of all these partial stories, he proposes a knowledge of the fine organic processes of cell-life as the only foundation of a rational doctrine of disease. The cell-theory, and its relation to practical medicine, however, is not altogether a novelty; but according to Virchow it has as yet only reached a certain stage of progress. What has been heretofore done, stands as a mere forerunner to his cellular pathology,—just as ideas stand to deeds, and imagination to investigation. The foundation upon which he fixes his deductions are actual histological facts, which he places before his disciples in the shape of microscopical preparations and drawings. It will be said by some that there is nothing new in the foundation of pathology on histology. And

on this score reference may be made to the last edition of Rokitansky's work, which is filled with numerous microscopic representations of diseased structures. It may be indeed asserted that Rokitansky even laid the ax to the root of his earlier, and somewhat humoral style of pathology. He has rejected the doctrine of Crases. In his third edition Rokitansky says:—"The origin and increase of cells and nuclei take place, either immediately out of a blastema, as free cells and nuclei, or in mother-cells and mother-nuclei, endogenously;" and he adds, "the extra-cellular origin of these elements out of a free blastema cannot be doubted, in my opinion, at the present moment." Virchow, on the other hand, utterly rejects the theory of the origin of free cells in a structureless blastema; just as elsewhere men reject the theory of equivocal generation. He asserts that only out of ready formed structures are cells; and out of old cells there is a continual growth and development of new cells, *omnis cellula ab cellula*. He substitutes a cell-growth theory for the blastema theory. He does not consider exudation as a peculiar product of the capillary vessels, containing plastic and other constituents; but he regards it as an ordinary transudation mixed with the products formed in the diseased structures outside the vessels, among which products may be mentioned fibrin, pus, mucus, etc. Hence, then, according to Virchow, the inflammatory process does not take in the capillaries, but in the elements of the tissues themselves—in the cells which through an increased activity attract the blood to them, and become thickened and swollen. In this manner, by cell-growth and by attraction of the juices, likewise arise all other new formations; the homogeneous, as well as the heterologous and malignant, so also new areola, or bony tissues, pus, tubercle, sarcoma, and cancer, the disease of plants, etc. The history of heterologous forms is this. In a particular place, or at a particular time, or in a particular degree, there arises a growth which is not proper to the part. Some other structure normal in some parts of the body is substituted at the part for the structure normal to it, forming what Virchow calls a pathological substitution of tissues. The malignancy of heterologous growths consists in this: that the tissue affected is, by its vascularity, disposed to form a fluid, which is injurious to the structures around. The dyscrasiæ, also, can only arise through the propagation by means of the blood, of the products of certain existing local affections. For example, the so-called phlogistic or fibrinous crasis depends originally upon a local production of fibrin in an inflamed tissue—fibrin being always a local product, and never arising in the blood. Many other blood-diseases, also, depend upon diseased states of the spleen and lymphatic glands—those being glands in which

white and red corpuscles arise. The disease which authors call pyæmia consists partly of thrombosis and emboli, partly of ichonhæmia, of lucocythemia; the substance which forms the obstruction in phlebitis not being pus, but a purulent-like detritus. Pus arises only out of tissues. Life and disease, in fact, cannot be explained by physical or chemical actions, but are the developments and processes of organized elements.—*Schmidt's Jahrb.*

A curious case of an ovarian cyst opening spontaneously five times during three years into the digestive tube, is related by Dr. Isnard. The cyst must have opened both into the stomach and the colon, as the liquid was evacuated by vomiting as well as by stool. The patient appears to have been radically cured by the injection of 50 grammes of tincture of iodine into the cyst. The iodine caused no symptom of poisoning, although the presence of the metal could be traced in the urine ten days after the operation. Two years after the operation the patient was in perfect health; the remains of the tumor being scarcely perceptible in the side.—*Med. Times and Gazette.*

Pleurisy, Bleeding, and Physicians' Fees 200 Years Ago.—On Tuesday, February 22, 1631, my father fell sick of a fever, joined with pleurisy, of which disease he lingered three weeks before he deceased. After his first and second letting blood, he found some ease; but the pain returning again to his left side, and the pleurisy appearing still to increase by his frequent spitting of blood, he was the third time persuaded by Dr. Giffard and Dr. Basherville, (who ever visited him twice each day he lay sick, and received each of them a twenty-shilling piece every time he came), his two physicians, to open a vein again on the 26th in the morning; after which, as before, he found a little ease for the present only; the same pain returned upon him so violently the Monday night ensuing, as he was enforced to let blood the fourth time. I never saw worse nor more corrupted blood come from any man, so as, had not that which remained been tainted likewise, we might have hoped the loss of so much corrupted blood would have made a way to his speedy recovery. But now his case grew desperate, in respect that his doctors durst not venture on this remedy any more, although he had found ease by it, supposing he had lost too much blood already for one of his age.—*Sir S. D'Ewes' Journal.*

We feel under obligations to our neighbor of the Democrat for the very complimentary manner in which he has alluded to our lecture, which was delivered at the University on Thursday evening.

"Long Preservation of Human Teeth.—A very interesting discovery has been recently made at the very gates of Paris, viz.: the tomb of a Celtic chieftain, interred more than twenty-five centuries ago, with the remains of his wife, his horse, and his armor, in the peninsula of St. Maurles-Fosses. Near this part the tumulus inclosed two skeletons, in a very tolerable state of preservation, lying on their faces, the heads being slightly turned towards the south-east. That on the left side, the body of the warrior, was placed in a very regular position, the head resting between the two hands; the jaws were furnished with nearly all the teeth, twenty-five of a beautiful whiteness, with the enamel preserved."—*Dental Cosmos.*

"Salivary Calculus.—A case of this somewhat rare affection has lately occurred in the person of the editor of the Gospel Banner, who devotes a considerable space, in the number of that paper for June 2d, to a description of his case. It appears that the patient had been subject to obstruction of the duct of the submaxillary gland from childhood, and, once before the present attack, a small calculus emerged from the duct, having been preceded by swelling and severe pain. At another time, an abscess formed in the gland. The last attack commenced with pain, swelling, and fever, which soon became extreme, and continued for ten days, when a hard, calcareous substance was found, through an incision previously made. This was extracted by forceps, and proved to be a salivary calculus an inch and an eighth long, and weighing ten grains. It appeared like a rough piece of yellowish-white coral."—*Boston Med. and Sur. Journal.* (*Ibid.*)

Black Oxyde of Copper in Loose Teeth.—Dr. Hoppe strongly recommends, when the teeth have become loosened, rubbing some of the black oxyde of copper well into the gums every morning by means of the finger. This induces the contraction of the hyperæmic periosteal vessels, and the teeth again become firm. Various stimulating applications will produce the same effect, but with injury to the gums.—*Berlin Med. Zeit.* (*Ibid.*)

Semi-Monthly Medical News.

VOL. I. LOUISVILLE, KY., NOVEMBER 1, 1859. NO. 21.

Report on Epidemics of Kentucky, presented to the State Medical Society, in 1859. By W. L. SUTTON, M. D., *of Georgetown, Ky.*

The committee appointed to report on epidemics, have had the same under careful consideration, and would respectfully report:

That since the appointment no epidemic has been known to prevail to any considerable extent through the State. Nevertheless, several diseases are believed to have been quite rife in particular localities; but your committee have received no information as to the extent or type of any one of them.

Notwithstanding that this is true, something may be said upon the epidemics of Kentucky, for the times admit of great latitude of interpretation. I propose, therefore, to say a few words upon one of the diseases which are classed under that head, viz.:

DYSENTERY.

In some localities, and in some years, the mortality from this disease has been frightful. Thus, in Madison county, in 1851, it was estimated by those well qualified to judge, that two hundred and fifty, more rather than less, died of dysentery. This would give about one death to every sixty-three persons living in the county.

In Simpson county, in 1853, of 119 deaths from ascertained causes, 84 were from dysentery; and, again, in 1854, of 154 deaths, 13 were ascribed to the same disease.

Again: in Letcher county, in 1852, of 14 deaths, 11 are attributed to this cause. And although there has been a falling

off in the deaths from this cause, yet the relative mortality is still heavy. During the six years of our registration returns, the annual deaths from dysentery have varied from 744 to 2260, and the proportion to the deaths from known causes, has been from 10.11 to 20.03 per cent. Thus it appears that in the most favorable years, more than one in every ten deaths is ascribed to it, and, in some years, more than one in five.

If we compare our registration reports with those of other States, we find that the mortality from this cause is vastly greater than in any of those which have furnished us a means of comparison. And here a grave question arises. Why is this so? What is there in the climate, soil, or manner of living in Kentucky, which occasions such a liability to this disease? There is one consideration which may be entertained. The causes of deaths, as they appear on our assessor's books, are given by the people, not by physicians, as a general thing; and with the people, in many sections, any bowel complaint is called dysentery. Hence it might appear that very many of those returned as having died of dysentery, really died of diarrhœa. This may seem the more plausible, because, north and south of us, in Massachusetts and in Rhode Island, and in South Carolina, diarrhœa cuts a much larger figure than in Kentucky. But this solution is scarcely satisfactory, because those cases are given in our assessor's book, in an overwhelming majority of instances, as from "*flux.*" Now I am not aware that this term is applied to anything but to dysentery. Therefore, whilst we may doubt whether a death ascribed to "*dysentery,*" was not really occasioned by "*diarrhœa,*" there is scarcely room for doubt when it is charged to "*flux.*" For myself, I am utterly unable to account for this great mortality from this disease.

As a means of setting this matter in as clear a light as I can, I append some tables which go to show the prevalence of dysentery in each county of the State during five years; as also in sections of the State having different geological formations.

Dysentery is one of those diseases generally attributed to malaria as their cause. But yet there are circumstances which exert a controlling influence in determining the precise disease which shall prevail. Whether it shall be cholera, diarrhœa, dysentery, or fever. What these determining influences are,

we, at present, are not satisfactorily certain. They originate different forms of disease, under circumstances apparently identical—*e. g.*, several men may, after an undue exposure to inclement weather, eat of the same food, and sleep under very similar circumstances;—one may be seized during the night with cholera morbus, one with diarrhœa, one with dysentery, one with fever, one with colic, and others may escape unaffected. No man may be able to distinguish any cause for the difference in the result in these cases; but there must be some, else the result in each instance would be the same, for like causes produce like effects under like circumstances. If external influences were in every respect identical, yet there is something in the condition of one man which renders him more obnoxious, or less obnoxious, to the influence of particular morbific causes than his neighbor is. It may be it will modify the action of the morbific cause so that it shall induce a modification in the form of disease which may follow. This may account for a difference in the form of disease which attacks individuals, but will not answer to explain the very general prevalence of fever at one time, and dysentery at another. Here, there must be causes operating exterior to individuals, and of a general character. It may be, and perhaps is true, that a certain modification of the thermometric, barometric, and hygrometric condition of the atmosphere, forming what has been called "*constitutio oris*," is the controlling power in those cases. It must be confessed, however, that we have no proof of such a modification of the atmosphere; and, if we had, unless we also knew in what that modification consisted, we should be just where we are at present, when we speak of an epidemic "*constitutio oris*," without being able to attach any appreciable idea to it. By examining the tables which accompany this report, we shall see that during five years of registration in Kentucky, the greatest mortality from cholera occurred in July; the greatest mortality from dysentery in August; the greatest mortality from continued fever in September; as also from cases returned as dying from "fever" without any qualifying word to indicate the kind of fever. The reader will form his own opinion whether the cases collected in these tables, are sufficiently numerous to determine any thing as to the *time* most favorable for the prevalence of these diseases.

LIABILITY.

I shall say nothing of the liability of races or sexes, because an examination of table VI. will give a better idea on this head than I could convey by a long description.

Of the means of prevention, we know but little, further than avoidence of undue exposure to inclemency of the weather, whether of heat or moisture, and especially to avoid exposure to cool breezes when the body is heated and at rest. The avoidance of excess in eating, and especially of indigestible food, moderate but not excessive exercise, and suitable clothing. In a word, a strict attention to keep the body in a healthy condition. Dr. Armstrong, of Casey county, reported in 1852, that "All those who would drink freely of the brine from the salt wells, were almost entirely protected against flux." Dr. Walton, of Hart county, reports that in 1853, "Purging freely with epsom salt as soon as the disease makes its appearance in one member of a family, will go far toward preventing it in the others. He states that a small child, belonging to a large family of blacks, being attacked by the disease, he immediately administered a large dose of the salt to every member of the family, except one, who was absent at the time. This one returned home with the disease after four or five days, whilst all who had taken the salt had escaped. These facts deserve being remembered and attended to.

Treatment.—I do not feel the necessity of going into a detail of symptoms, because I have no especial visitation to describe, and the symptoms of this disease are so well known to all physicians, as to render a general description unnecessary.

The treatment of this disease, like that of all others, requires to be very much modified in different years, and in divers locations—nay, even in the same season and location.

Opium occupies a larger space in the treatment of dysentery than any other remedy. It is used in various ways and different sized doses. In many mild cases, it is sufficient to introduce a pill containing from half a grain to two grains of solid opium into the rectum after each stool. This will frequently cure in twelve or twenty-four hours. In many severe cases, a dose of four or five grains of solid opium, given at the onset, will cut the disease short. In some recent cases of most excru-

ciating sufferings, with very frequent dejections, I have seen a teaspoonful of laudanum (℥j) in two or three tablespoonfuls of ice water thrown into the rectum, act like a charm, in relieving present distress. To be sure, I have seen the first injection thrown out in a few moments, but a second, administered immediately, has rarely, if ever, failed to quiet the rectum. When the present suffering has been less severe, but the tenesmus considerable, a full dose of laudanum, say sixty to one hundred drops, with an ounce of epsom salt, is a very good prescription. The opium quiets the bowels for ten or twelve hours, when the salt operates, bringing free liquid stools without griping. Or some prefer to give a large dose of the salt, and when it shall have purged freely, then the anodyne, repeating these alternately until the disease gives way. It is always desirable to secure sleep by opium. Along with this course of purgatives and anodynes, it is frequently necessary to administer injections more or less frequently. As a general rule, perhaps, half a teaspoonful of laudanum in a little iced water is best. At times a little warm starch with laudanum is better. And again a large enema of cold or warm water alone is better than either. In still other cases the rectum is so irritable that it will retain nothing that is of any bulk—then a pill of solid opium of one or two grains passed up the rectum and above the sphincter. But it seems there are cases in which even the presence of the pill will not be tolerated. And here let me enforce one remark. In the treatment of dysentery, but especially in reference to injections or suppositories introduced into the rectum, let the physician assure himself that his instructions are faithfully carried out. I am assured from experience that we are more frequently deceived on this point than we have any conception of. Patients frequently have great reluctance to suffer injections to be given them; and the nurse, many times, is glad of an excuse to omit them; and thus they are altogether left off, or only occasionally and imperfectly employed. If the pill is left below the upper border of the sphincter, it, of course, is thrown out and does no good. And as the rectum continues irritable, it is charged with throwing off the pill, when, in fact, it had never been introduced so as to do any service.

Such is the basis of treatment with many of the best physicians of the State. They eschew mercurials as injurious, alleg-

ing, indeed, that they have seen mild cures converted into severe or fatal ones by a single mercurial.

Again: many of our best physicians look upon mercurials as among the most important means of treating the disease, and like the first mentioned, holding opium in the first rank. These, at the onset, give a decided dose of calomel, blue mass, or mercury with chalk, united with from three to five grains of opium and as much ipecac, to be followed by epsom salt or castor oil, at an interval of twelve or fifteen hours, if necessary. After the operation upon the bowels, they give opium and ipecac in grain or half grain doses of each, with or without a small dose of mercurial, every two, three or four hours, as they may judge proper, to control the bowels and "keep up the secretions," which generally means those of the liver. Sometimes a dose of epsom salts or of castor oil is interposed occasionally, in order to evacuate the upper portion of the bowels. But, in other cases, a dose of mercurial, very much like the first, is repeated on the second or third night, and the smaller doses continued as before. With a portion of this class of physicians, epsom salt and castor oil stand in about equal favor as a secondary purgative. Others prefer the salt, whilst others object to it as mischievous, saying they have seen cases nearly killed by a dose of salts.

When there is sufficient reason to think that the liver is performing its function badly, we may give twelve, fifteen, or twenty grains of calomel, or a dose somewhat larger of blue mass or mercury with chalk, united with two to four grains of ipecac, and as much opium, or a grain of sulphate of morphia at bedtime, to be followed or not next day by epsom salts or castor oil. If the calomel bring down consistent stools of a bottle green color, it will have done good. We may have given so much salt as to produce watery stools, but if the bottle green color is there, it will do; otherwise, or if the stools, though consistent, be of a spinach color, the mercury has not produced its best effect.

I may observe here, that according to my recollection, dysentery was more easily managed thirty or forty years ago than at present; and that, at that time, mercury could be more confidently relied upon to produce the bottle green discharge than now. And it would seem to follow that the disease then more

frequently demanded mercurials than of late; and very few, if any, died where these bottle green stools were procured. Since the typhoid fever has spread through the country, there has been great difficulty in procuring these stools, and a general conviction prevails that mercury is very much less needed in the treatment of almost all diseases than it formerly was.

There is reason to fear that each class above mentioned errs in being too much wedded to a particular course of treatment, having generalized from facts too few to justify their conclusions. I remember very well that in 1822–3, when a severe grade of bilious fever prevailed in Kentucky, and calomel was by general consent considered remedy No. 1, I was struck with the quantity which I used, and concluded that surely I was giving it in excess, and determined to diminish the quantity. I was not pleased, however, with the change, notwithstanding, as I thought, I had made a fair trial. Now it is probable that my trial was unsatisfactory—not because the treatment was not as proper as the preceding, but because the cases were more severe;—for one of my brethren who thought calomel injurious, was as well satisfied with his treatment as I was with mine. I fear that the result of a few cases, in which personally or otherwise we feel a deep interest, has very great effect in fixing in our minds the value of the treatment pursued. We should, in the first place, consider what organs are disordered, and next, how that disorder is to be remedied. If the functions of the liver are deranged, and the secretions obstructed or vitiated, we may very properly entertain the question, whether mercury, in some form, should not be administered. Thus, in 1851, Dr. Ray considered mercury decidedly improper, but in the next year he found cases which he could not manage without it. Such, I apprehend, might be the experience of most of us—that mercury is as important in some cases as it is improper in others. In our researches into the condition of the liver, it is important for us to bear in mind that a discharge of greenish mucus does not necessarily imply a disordered action of the liver. An autopsy is given in Horner's Pathological Anatomy, p. 176, of a child whose gall bladder and small intestines contained yellow bile, in the latter site "almost pure, excepting some mixture of mucus. In the large intestines, the contents were alse bilious, but greenish, like the

discharges which had prevailed." Again, the evacuations may give no evidence of fæces, properly so called, and yet there may be in the upper portion of the bowels, well eliminated fæces, which may be brought down in good consistence by a dose of salts not sufficient to produce watery stools. Thus it is evident that the color and character of the contents of the bowels may undergo a change after they leave the small intestines. And, again, that great irritability of the rectum is perfectly compatible with a torpor or impeded vermicular action in the upper portion of the bowels. It will generally be found that the difficulty in curing the disease depends, to a very large degree, upon the continuance of this abnormal condition of the different portions of the bowels. But, whilst we must be very careful to ascertain the condition of the bowels and of the liver, we must not forget that other organs have become, or are likely to become involved, and require attention. In every case of medium severity, the skin and kidneys become implicated. Early in the disease the skin is frequently warm and dry. If the pulse will *tolerate* bleeding, it will be apt to do much good. It has been said by high authority that he never lost a patient when he could bleed. It benefits the patient by reducing febrile excitement and thereby putting the different organs, skin, etc., in a way to be more readily influenced by other remedies. But presently the skin loses its heat and becomes either of a natural temperature or below it, but retains its dryness. This should be met by diaphoretics, among which may be used preparations of ipecac and opium, with or without a mercurial, nitric ether, warm bath, and friction. A jug of warm water kept near their feet, as soon as they show a disposition to become cool, will be found an important adjunct. Blisters, sinapisms, embrocations, frictions, etc., are of much service. Blisters are liable to a serious objection in some cases by the pain they give in rising to stool; yet, in other cases, they cause little trouble, and do much good. Sinapisms frequently repeated and fomentations continued during the intervals, will have a continued influence for good. These should be kept up whilst some of the diaphoretic medicines should be exhibited every two or three hours.

These same remedies will avail much when the kidneys are affected. Nitric ether or Dover's powder will come in play;

also a sinapism applied occasionally over the region of the kidneys. In this condition, we should expect much from free draughts of mucilaginous drinks, and accordingly we find (perhaps without any reference to this state of the kidneys) a free use of diluent drinks recommended in dysentery. In this connection I would mention a fact which I have observed too uniformly to consider it at all accidental, namely, in about twenty minutes after taking a drink of tea or other fluid to the amount of five or six ounces, the patient has been obliged to go to stool. This, however, is compatible with the ultimate beneficial action of the diluent.

When we consider that dysentery is attributed to the same causes which produce bilious fevers—that, in fact, it is by many considered, in the language of Rush, "Fever turned inwards upon the intestines," we may well question whether quinia has received as much attention in its treatment as it should have done. We know that many years ago, Peruvian bark was held to be a very important remedy for epidemics of this disease, which raged in the south of Europe. It is altogether probable that we do not seek as diligently for slight exacerbations and remedies, or other evidences of periodicity as we ought. If, upon a close examination of the disease, we should have reason to believe that there is a periodical feature present, there would be little doubt of the propriety of prescribing quinine. Indeed, it is well worthy of consideration, whether a fair dose of quinia might, with advantage, be united with an anodyne at night, or early in the morning, so as to bring the system under its influence before noon. If we can, in this way, secure a moderate moisture of the skin, we shall have done good, even if we shall have failed to make any applicable impression upon the frequency of the stools or tenesmus. For we must remember that several "centers of sympathy" are disturbed, and if we can rectify one, we will thereby greatly increase our means of acting upon the others.

At the onset of the disease, in a certain number of cases, there is nausea or vomiting, yellowish tongue, and a bitter taste in the mouth. In these cases it is proper to begin the treatment by administering an emetic, which it may be necessary to repeat during the treatment. When the nausea remains distressing, a spoonful of camphor water, made very cold

with ice, every half hour, will be found a very grateful remedy. Cupping or leeching the epigastrium will also be very proper. Creosote, in half drop doses, is also beneficial, or two or three teaspoonfuls of brandy undiluted. When thirst is great, lumps of ice chewed and swallowed will afford much relief, or rinsing the mouth and fauces frequently with any fluid; sponging the surface with weak warm ley will also give relief.

Throughout the disease the horizontal position should be strictly observed, and the patient should be strictly charged to restrain, as far as he possibly can, every inclination to go to stool. He may be materially aided in these endeavors by having a moderately firm pressure on the anus, with warm cloth. When under the necessity to go to stool, there is frequently a desire to remain long over the vessel. This inclination should not be gratified, but the time spent there should be curtailed as much as may be. I am satisfied that very much depends upon a faithful adherence to these suggestions, trifling as they may appear.

I am satisfied that I have not presented any thing new, as to the cause, treatment, etc., of dysentery. Nor am I aware of being able to say any thing novel as to any of the diseases called epidemic. But I am enabled to furnish facts which may tend towards developing the *natural history* of diseases. In the first of the following tables, I give the average number of those who have died for five years of each of those epidemic diseases which has prevailed to any extent, and of those from the whole class, with the proportion of deaths to the inhabitants of each county. This table also gives the quantity of land, the improved and unimproved in each county, and the density of the population. Tables *second* and *third* are intended to divide the State into regions according to geological formations as at present understood, and to show the prevalence of each disease in those formations. The standard of comparison in these tables is not the population of each county that is given in the first table, but the mortality from known causes.

Tables IV to X were constructed for the purpose of comparing the effects of race, sex, and age, as also season upon liability to certain diseases. I do not know of an equal number of cases by which this comparison between the races and sexes can be so well studied.

(To be continued.)

Cases of Diphtheria, with remarks on the Pathology, Symptoms, and Treatment of the Disease. By J. S. Bristowe, M.D. F.R.C.P.

The disease termed diphtheria, notwithstanding that it has prevailed so extensively, and now for so long a period, is still regarded with such interest, that any observations with regard to it, even though they be merely confirmatory of previous statements, will doubtless be acceptable to the profession. I purpose, therefore, in the present communication, to record my own experience of the disease, and to express the views I entertain with regard to its pathology, symptoms, and treatment.

The four following cases all originated within the walls of St. Thomas' Hospital; the first two recently, in a surgical ward in which erysipelas had prevailed about a couple of months before, and in which there had been a mild case of scarlet fever six weeks previously; the last two some years since, but at a distant interval and in different wards.

Case 1.—T. N., a boy 10 years of age, had been under Mr. Solly's treatment in St. Thomas' Hospital since November 12, 1858, for contraction of the arm after a burn. He had gone on favorably until the 21st March, on the morning of which day he is said to have had a slight attack of shivering.

On the 22d (if not before), he complained of sore throat; had a purgative administered, and mustard poultice applied to the throat, was put on milk diet; and in the evening began to take chlorate of potash with decoction of cinchona, and to use a gargle of chlorinated soda.

On the 24th it was noted by the Registrar, that the throat was much swollen externally, particularly on the right side; that the right tonsil was much enlarged and covered by a pultaceous material; that the pulse was small, weak, 130; that the tongue was furred, and the skin cool.

On the 25th, at 1 P. M., he was placed under my care. His bowels had been relieved, and had passed a fair night, and was said to be a little better than he had been. He was extremely feeble, however, but not at all feverish, and perfectly rational. The skin was cool, and without rash. Pulse small, weak, slightly irregular, about 100. There was great tumefaction, hardness and tenderness in the upper half of the throat; but

chiefly in the parotid and sub-maxillary regions, and more on the right side than on the left. The anterior half of the tongue was clean, and its papillæ were healthy; its posterior half was somewhat furred. The right tonsil was much swelled and covered by a thick wash-leather-like false membrane, which was prolonged over the pillars of the fauces, and the right half of the soft palate. The nose had bled in the morning and a little thin sanious fluid continued to ooze from it. He had no pain any where except in the throat. Had pain and difficulty in swallowing, but could take fluids. There was no cough or impediment to respiration.

To continue the gargle, but to omit the mixture. To have a bran poultice to the throat.; to take soda-water; and to have, in addition to milk diet, a pint of strong beef-tea, two eggs, and four glasses of wine.

He slept well the following night; but when seen the next day (the 26th) at 2 P. M., was evidently dying. His skin was cold, his pulse was imperceptible, his tongue dryish, yet little furred, and his breath of a distinctly gangrenous odor. He was perfectly sensible, but very restless. He had no embarrassment of breathing, but much pain in swallowing, and tenderness in the throat, which had become more swelled externally, and studded on the right side with hæmorrhagic spots, but presented internally the same characters as before. In other respects there was no change. Ordered three glasses of brandy. He died at 5:30, remaining sensible to the last.

The urine unfortunately was not examined, owing partly to his passing extremely little, and partly to the negligence of the nurse. No rash was ever detected, and the tongue never exhibited the scarlatinal character. It is not known whether he had ever suffered from scarlet fever.

Autopsy.—The whole of the muscular and cellular tissues of the neck, from the jaw above to the superior thoracic orifice below, and from the integuments to the vertebræ, were tumid, indurated, and so infiltrated with blood as to be almost black. The soft palate was half an inch thick, infiltrated with blood, and studded with shreds of false membrane. The tonsils were much swelled and deeply congested; the left contained numerous small suppurating cavities, the right was gangrenous; and both were covered pretty completely by tough, greyish-yellow

adherent false membrane. The mucous membrane of the base of the tongue, of the back of the pharynx, and of the posterior nares, and that covering the epiglottis and upper half of the larynx, were thickened, infiltrated with sanious fluid, and covered by patches of fibrinous exudation. The false membrane was made up chiefly of fibrillated lymph, the fibrils being irregular in form, but generally comparatively thick, and assuming a reticulate arrangement. The superficial portions presented large numbers of more of less perfect epithelial cells, together with granular matter. No vegetable parasitic growths were recognized. The trachea and œsophagus were in a normal condition.

Chest.—The pericardium was healthy. The heart was small, firmly contracted, and nearly empty; its auricles and right ventricle containing a little fibrinous clot only. The muscular tissue of the organ was generally pale, but presented numerous and extensive tracts infiltrated with extravasated blood; and under the microscope was distintly fatty. Pleuræ healthy. The lungs were crepitant and little congested. The superficial portions, however, presented a few dark red, almost black, patches of solid granular lung tissue. The bronchial tubes contained much mucus.

Abdomen.—Peritoneum, stomach, and intestines healthy. The cellular tissue of the mesentery presented numerous patches of extravasated blood. The liver was perfectly healthy, but its surface was studded with minute petechial spots. Spleen pale and healthy, not soft. The pancreas was healthy, but there were extravasations of blood into the cellular tissue around it. There was distinct hæmorrhage both into and around the suprarenal capsules. The kidneys were of usual size, pale, and apparently quite healthy. But under the microscope the epithelial lining of the tubes was found to be thickly studded with molecules of oil, and often confused in its arrangement; some of the tubules contained extravasated blood, others transparent fibrinous casts; and a few of the malpighian bodies presented accumulations of granular exudation matter.

Case 2.—W. A., a boy, aged 8 years, had been in the same ward as the last since March 1, having large tonsils and a cleft palate, which latter it was intended to remedy by operation.

On March 27th (the day after the death of the former case),

he complained of a slight sore throat. On the morning of the 28th it was rather worse. There was some swelling and tenderness below the angles of the jaw; and the tonsils, which were enlarged, and the back of the pharynx, presented small patches of false membrane. Skin cool, perspiring; no rash. Face a little flushed. Tongue slightly furred. Bowels open; appetite not good; little thirst, but no headache; pains in limbs, or rigors. Milk diet. ℥vj. wine. Soda-water. Bran poultice to the throat. To take a simple febrifuge mixture. To use his milk warm, as a gargle. In the evening he was transferred to a medical ward, and placed wholly under my care. Two eggs daily were ordered, and ℥j. wine every two hours, night and day.

March 29th.—Slept comfortably; about the same as yesterday in his general symptoms. Skin warm; tongue clean; slight thirst. Considerable pain in swallowing. Submaxillary regions swelled and tender. The false membrane covers both tonsils, and the adjacent portion of the split soft palate, and has become more abundant on the back of the pharynx; it is thicker and whiter than before. He was ordered in the evening to take ℥j. port wine every hour night and day, together with four eggs and milk, to be administered in small quantities, but frequently.

30th.—Much the same to-day; the membrane has not spread; the pulse is less frequent. The bowels, which had not been relieved for two days, were opened by a castor oil injection. Ordered a pint of strong beef tea daily.

31st.—Slept fairly, feels better. Submaxillary region less swelled and tender. Can swallow more comfortably; the membrane has spread no further, and seems separating; tongue clean.

April 1.—Slept well; is evidently improving. No submaxillary pain when quiet, but still has pain in swallowing. Skin warm. Tonsils less swelled, membrane coming away. The tongue, however, is foul, and the wine has been making him sick. Ordered to take sherry instead of port, and during the coming night every two hours instead of every hour.

2d.—Still improving; slept well. Has recovered from his nausea, and has this morning commenced taking his wine every hour.

3d.—Still progressing favorably. A little fullness but no

tenderness below angles of jaws; a little uneasiness only in swallowing. Tonsils subsided; membrane coming away in fragments. To take a grain of quinine thrice daily, and to use a gargle containing chlorate of potash. He continued to improve in all respects during the next day or two, taking all his wine, eggs, strong beef tea, and milk, but becoming somewhat tired of the wine. His bowels, however, required opening by means of medicine. By the 6th his tonsils were nearly clean; his uvula, which had become exposed, was slightly excoriated; and his relish for food was returning. His wine was reduced to ʒxvj. On the 7th he began to take rice pudding. By the 8th the throat had become perfectly natural in appearance and his appetite was assuming its healthy proportions. The wine was reduced to ʒxij., the eggs to two, the beef tea was countermanded, and he was put on mixed diet. Still gradually recovering health and strength, the wine was reduced to ʒviij. on the 10th, and on the 12th to ʒiv.; and on the 15th he was retransferred to a surgical ward perfectly restored.

I may here add that the boy never manifested any distinct febrile symptoms, rarely any headache, and that he usually slept comfortably. His tongue was generally clean, and its papillæ were never enlarged. The skin was sometimes hot, but never dry; never presented any rash, or tendency to peel. The pulse varied at from 130 to 112 in the minute, sunk to 108 immediately after the wine was raised to ʒxxiv., and then gradually subsided to its normal frequency. During the earlier period of the disease the urine furnished abundant lithates; on the 7th day first contained a little albumen, which continued for about five days, then disappeared. The false membrane came away gradually in fragments, was several times examined microscopically, and found to present the usual appearances. It is stated that he never had scarlatina.

Case 3.—M. A. F., a single woman, aged 22, was admitted at the beginning of February, 1853, for some pulmonary complaint, from which she soon became convalescent. No notes of the case are preserved, but it is clear from the treatment recorded on the bed ticket, that on the 12th of March she began to suffer from inflammation of the throat, and that it continued increasing in severity up to the time of her death, on the 24th.

Autopsy.—The mucous membrane of the pharynx, fauces, and

base of the tongue was covered by a layer of tough, dirty greyish lymph between a half and quarter line thick. Its free aspect was irregular, fissured, and in places flocculent. It adhered pretty firmly to the subjacent mucous surface, which was congested, and here and there excoriated. It ceased gradually at the lower part of the pharynx; and the œsophagus was healthy. Both surfaces of the epiglottis, and the rest of the mucous membrane of the larynx, were similarly enveloped in a layer of adherent lymph, which was prolonged into and filled the sacculi laryngis. The mucous membrane was congested and much thickened. There were a few patches of lymph in the trachea. The membrane presented under the microscope a fibrillated structure, mixed with epithelium and nuclear bodies. Pleuræ healthy. Lungs of moderate size, but firmer and heavier than natural. They were congested, and, on close examination, presented a peculiar mottled aspect, owing to numerous patches of a dark color being scattered uniformly and thickly throughout the substance of the organs, but separated from one another by a network of lighter and more healthy looking tissue. The solid patches were small (about the size of one or two lobules each), airless, granular, and in some instances black as pulmonary clots. They were observed microscopically to consist of air-cells, filled with a coherent mass of nuclei, having a close but not perfect resemblance to pus. The bronchial tubes contained much frothy fluid. The pericardium and heart were healthy.

Case 4.—J. P., a man 35 years of age, was admitted into a surgical ward on the 29th June, 1852, for psoas abscess, and was treated with good diet, stimulants, and morphia. He seems to have gone on without any complication until Oct. 13, when, probably for croupy or laryngeal symptoms, he was ordered ʒij. of antimonial wine every four hours. On the 15th a blister was applied to the throat, and on the same day he died.

Autopsy.—Much emaciated; several small openings were seated in the right groin. The tonsils were healthy, but the surface of the pharynx behind them was covered by a thick, loosely-adherent, white, softish material. This extended in large quantities half way down the œsophagus, and in the form of apthous patches studded the remainder of the tube. The mucous membrane of the pharynx and upper half of the œso-

phagus was much ulcerated; that of the lower half of the œsophagus congested, and in places excoriated. The upper half of the larynx was loaded with a similar deposit, and its mucous membrane was œdematous and ulcerated. The lower half of the larynx and the trachea were healthy; the lungs a little congested only. The deposit was made up microscopically of epithelium and fibrillated material. A large psoas abscess was found, unconnected with bone, but no further visceral disease.

In this the second part of my communication, it is my intention not to give a detailed account of the pathological condition of all organs, to enter into a minute analysis of all symptoms, and to discuss the various forms of treatment that have been adopted, but simply to dwell on such points connected with the pathology, symptoms, and treatment of the disease as are of real interest or importance, or have appeared so to me in the cases that have come under my observation. And I may here state, that the remarks which follow are not founded on the previously detailed cases alone, but additionally on six or seven other cases which I have had more or less satisfactory opportunities of watching during life; on one other careful and complete necropsy; and on various specimens of diphtheritic throats, false membranes, and kidneys which have been submitted to me at different times for examination.

Pathology (a).—The most prominent, and probably the most characteristic feature belonging to diphtheria, consists in the deposition of a false membrane upon the fauces, pharynx, and adjacent parts. This membrane appears very early in the disease, and perhaps generally first on the tonsils, in the form of one or more whitish or greyish circumscribed patches, not unlike those resulting from the application of nitrate of silver. Having once commenced it extends rapidly, so that in the course of a day or two, or even in less time than this, it may have formed a tolerable uniform layer, covering the whole of the tonsils, the pillars of the fauces, the soft palate, pharynx, and base of the tongue; may have involved the posterior nares, and the larynx itself; and may have even spread into the trachea and bronchial tubes, or down the œsophagus possibly to its cardiac orifice. Its thickness increases with its area, and at

the same time it becomes of a more opaque, dirty white hue, and more or less fissured on the surface. At the end of several days it ceases to spread, its edges begin to curl up, it becomes gradually detached, and comes away either as a complete membranous cast, or in a more or less softened and fragmentary condition. The deposition of this material is associated with, and no doubt dependent upon, a peculiar form of inflammation in the subjacent mucous membrane, attended by a variable amount of congestion and inflammatory exudation into the submucous tissue; in consequence of which a more or less brawny condition of parts is produced, especially observable in the lax cellular tissue of the larynx, when that organ becomes involved. The local inflammation is commonly neither very severe nor very deep, and disappears with the detachment of the membrane, leaving only a delicate and sensitive, or at most slightly excoriated surface behind. But, in some instances, the inflammation is of a much more intense character; involves the substance of the tonsils, causing them to swell, soften, suppurate, and even to slough; includes the lymphatic glands about the angles of the jaws; and may even extend throughout the whole of the tissues of the throat as far down as the sternum, rendering them hard, brawny, and intensely congested. It follows, therefore, that while the faucial inflammation is generally superficial, and the false membrane generally limited to the mucous membrane of the throat, the former may penetrate to any depth and be followed by any of the recognized results of inflammation, and the latter may spread to any of the adjacent prolongations of mucous membrane; either of which circumstances must materially modify the symptoms, and affect the issue of the case.

The false membrane itself varies in thickness from a line or two downwards, and in consistence from that of ordinary recently coagulated lymph to a friable or even diffluent pulp. It consists essentially, according to microscopic examination, of a network of coagulated fibrine, in itself not materially different from that deposited on inflamed serous surfaces; but mixed more or less with the proper epithelium of the part, with imperfectly formed or breaking down cells, and with granular matter. I believe that in the first instance the lymph is effused beneath and among the epithelial structures, entangling them

in its meshes; and that the subsequent exudation accumulates beneath the layer thus formed, becoming gradually more and more free from cell formation, and more and more purely lymph; so that in the fully formed membrane the attached surface will be found to consist of coagulated fibrine alone, the superficial of a certain amount of fibrinous exudation, together with epithelium, and any accidental matters which may have become adherent to it. It has never happened to me to detect it in any vegetable growths, and it is evident that their occasional presence is accidental only and quite unimportant. The false membrane of diphtheria has no specific character; it is not only not due to any form of parasitic growth, but it differs, according to my own examinations, in no respect from the false membrane of common croup, nor from that occurring occasionally in cases of erysipelas, nor lastly, I believe, in any important point from the exudation upon the pharynx and larynx occurring in the course of small pox. I have examined the subjacent muscular fibres, imbedded even in inflammatory exudation, and found them to display their normal, striated character.

(b.) The lungs exhibit usually, I believe, a healthy appearance; still they occasionally present conditions which deserve consideration. It is recorded that in some instances the diphtheritic membrane, as in cases of croup, has extended from the larynx and trachea into the bronchial tubes. Further, when the larynx is affected, the tubes become generally loaded with secretion. But the most remarkable condition I have observed is one which in extreme cases affects pretty uniformly the whole of both lungs. These organs become more heavy and solid than natural, in consequence of extensive hepatization; the hepatization occurring in patches of small size, which are thickly and uniformly scattered, and separated from one another by a network of still crepitant tissue. The solid patches are granular, sometimes presenting the characters of red hepatization, sometimes those of apoplexy, and sometimes those of purulent infiltration. The affection is, in fact, a well marked and true lobular pneumonia. It appeared in an early and imperfect stage in the case of T. N., but was exceedingly well developed in the case of M. A. F., and in one recently under Mr. Simon's care; both of which latter proved fatal at a compara-

tively late period of the disease. This affection of the lungs is interesting and important, but is not peculiar to diphtheria. It is, I believe, a not uncommon sequel to laryngeal disease, and is allied to, if not identical with, a condition of the lungs resulting, more especially in children, from capillary bronchitis.

(c.) The kidneys in all cases which I have examined, have to the naked eye appeared perfectly healthy, but when tested by the microscope have invariably displayed distinct marks of disease. The disease, which is no doubt inflammatory, manifests itself in its milder forms by a little hæmorrhagic exudation into the tubules, and a granular condition of the epithelial cells. In its more severe forms, the epithelial cells are swelled up so as almost to obliterate the channel of the tubes, are opaque with granular matter and oil, and seem often to have lost their mutual adhesion; cylinders of the diseased epithelium become shed, and in addition transparent fibrinous casts are produced, and traces of intra-tubular hæmorrhage are seen. The malpighian bodies seem generally healthy, but in some instances a little exudation matter may be recognized between the capsule and contained tuft.

(d.) The heart is usually in a normal state, but in one instance in which I examined it carefully, its fibres were in a well marked fatty condition, and in the same case there had been extravasation of blood into its muscular tissue.

(e.) The blood, so far as its appearance goes, has seemed normal, and has furnished the ordinary forms of coagula in the heart's cavities. But that this fluid is in an unnatural condition, at all events in some cases, is shown by the fact of the occasional appearance of a kind of dark measley eruption, probably petechial, shortly before death; and by the occurrence in the case of T. N. of similar extravasations on the surface of many of the internal organs, and in the substance of the heart and suprarenal capsules.

(f.) I have never observed any eruption on the skin, beyond that above alluded to, nor any evidence of desquamation. I have not recognized any traces of dropsical effusion, although from the condition of the kidneys its supervention might reasonably be expected. And, finally, I have met with no pathological conditions in any other organs, sufficiently constant or sufficiently important, to render the details of them worthy of

record. I may add that, as may be seen by comparing the case of T. N. with the others above recorded, diphtheria, like small pox, scarlatina, and some other fevers, may vary from a comparatively simple and mild disorder, to one of the utmost malignity, attended by that rapid sinking, and by those internal hæmorrhages which characterize such types of disease.

Symptoms.—The symptoms of the disease have been so well described that I ought, perhaps, to apologize for venturing to make any observations on this head. I am desirous, however, before discussing the treatment, briefly to call attention to the more important symptoms, to contrast them with those presented by other diseases with which diphtheria is liable to be confounded, and to review the different modes in which death appears to be produced.

(a.) The usual history of a mild diphtheritic attack is, I believe, the following: The patient without, or at most with extremely mild, premonitory symptoms, is attacked with slight soreness of the throat—that soreness being associated, even from the first, with the deposition of false membrane, and unattended by the ordinary symptoms of fever. For several days the soreness of throat increases, the membrane extends, and some fulness and tenderness appear in the submaxillary regions. There is still, however, no appearance of fever, no unnatural heat of skin, no pains in the head, back, or limbs, no dryness of tongue, no marked thirst, and no tendency to delirium at night; yet the patient loses strength, and the urine possibly becomes albuminous. After the further lapse of a few days, the soreness in the throat and the external tenderness diminish; the false membrane separates, leaving the denuded surface either slightly excoriated or simply irritable, and but for the now probably confirmed albuminous condition of the urine and the increase of debility, the patient appears to be going on favorably. Notwithstanding, however, the disappearance of all those symptoms which in the beginning were looked on with alarm, the patient, with no obvious cause, except perhaps the persistence of albuminuria, still loses strength, becomes anæmic, and finally recovers health only after a very protracted and fluctuating convalescence.

The above detailed symptoms are probably those of nearly all cases of diphtheria; but the most remarkable of these are

the affection of the throat, the absence more or less complete of fever, the condition of the urine, and the great debility. They are, however, liable to vary somewhat, according to the severity of the attack and probably accidental circumstances, and occasionally others of more or less importance may be superadded. —*Med. Times and Gazette.*

Memoirs on Diphtheria, from the Writings of Bretonneau, Guersant, Trousseau, Bouchut, Empis, and Daviot. Selected and Translated by Robert Hunter Semple, M.D., *with a Biographical Appendix by* John Chitto, *Librarian to the Royal College of Surgeons. London: The New Sydenham Society*, 1859. *pp.* 407.

Amonst the many remarkable things to be noted in the annals of our profession, we hold it to be not the least remarkable circumstance that, in a science of observation, as, more or less, medicine undoubtedly is, a disease will arise, spread, and exist for ages, die out, and almost be forgotten, reappear, be described as a new disease, its etiology be misunderstood, its pathology incorrectly described, its treatment, as a natural sequence, be established on uncertain data—until the appearance of a master mind, who, studying the symptoms of to-day by the light of the records of past ages, recognizes the identity of the two affections; by laborious toil in the dead-room establishes on correct data its pathology, and, availing himself of the experience of the past, with the increased light shed on medicine by the advanced position occupied by science at the present, directs its treatment on rational principles, and, as a consequence, is by many looked on as the original discoverer, of a new disease, though such be not the case. His only claim is to have described that which has been known for centuries, but to have done so more in accordance with the position that, at the present moment, pathology should occupy amongst scientific physicians. Such is the history of diphtherite, and such is the relation held to it by the distinguished physician of Tours.

For the present collection of papers on this subject we are indebted to a new Society that has started up amongst us—"The New Sydenham Society"—a Society that, in our opinion, seems to have adopted for its motto, *de facto*, if not *de jure*, Deeds, not Words, this being the third volume already this year presented to its members; the first volume, Diday on Infantile Syphilis, has been lying on our table for some time, and a review of it should have appeared in the current number of this Journal, but, considering its subject to be of so important a nature, and that the intrinsic merits of the book itself demand more space than we

can spare to it at present, we have postponed its appearance until our November issue, when we promise our readers a full analysis of one of the ablest works that has yet appeared on this most intricate subject. In the meantime we can only wish success to a society that has inaugurated its career in so auspicious a manner.

Amongst the series of papers now before us, far the most prominent position is allotted to M. Bretonneau's memoirs on Diphtheria—in fact these, five in number, constitute fully one half of the volume, and, taking into consideration the advanced position in reference to this disease occupied by this learned and zealous physician for considerably more than a quarter of a century, we consider that the post of honor has been justly conceded to his deservedly acknowledged supremacy. To our minds a great charm is thrown around this gentleman's writings by the mixture of earnestness, frankness, and simplicity, by which they are characterized; thoroughly imbued with the importance of the views that he advocates, he never for a moment seems to be ashamed to put on record the errors he unintentionally fell into in his search after truth. An air of candor seems to pervade all his writings on the subject. and he appears to have written with but one sole motive in view, the establishment of correct views about this disease, based on the only sure foundation—sound pathological investigation—and on these to raise up a superstructure of rational, and, because rational, successful treatment. As an example of these statements, we shall extract the very first case he has put on record:

"Case 1.—A child, five years old, healthy, and of good constitution. Coryza, rather severe pain of the ear, which was relieved after the appearance of a serous discharge through the auditory canal. For two days only there had been slight pain in the throat; deglutition was so little affected that the child supped in the evening with its parents, and with its accustomed appetite. The third day the throat appeared to be obstructed, and on examination of the back of the mouth, at 11 o'clock, a. m., large grey spots were seen covering the tonsils, the bases of which were red and swollen. Eight leeches were applied to the sides of the neck, and produced an abundant flow of blood; and kermes mineral was given in emetic and repeated doses. There was a hoarse cough, with alteration of the sound of the voice; in the evening there was aphonia, extreme fetor of the breath, a blackish grey tint of the eschars which extended over the whole surface of the pharynx; frequent and small pulse; dyspnœa, lividity, and sinking, which terminated in a peaceful death during the early part of the night."

"It appeared to me very evident that death was caused by gangrene of the back of the mouth; but I asked and obtained permission to make inquiries into the extent and true seat of the disease, which had had so rapid and fatal a termination."

"Necropsy—External Appearance.—Body stout; lividity; tumefaction of the sides of the neck. Internal appearances, observed eight hours after death! The velum palati was of a blackish grey tint, as far as the hight of the palatine arch; the putrid decomposition of the surface of the tonsils appeared still more advanced; the eschars extended from the guttural opening of the nasal fossæ as far as the commencement of the œsophagus; they penetrated into the glottis, where they assumed a dull white tint. Their margin was marked by a bright red line. The mucous membrane of the trachea exhibited no trace of inflammation; a small quantity of mucous was accumulated near the bifurcation of the bronchi. This gangrenous alteration, which had extended with so much rapidity, had gained so little in depth,

that the velum palati, divided from before backwards, presented a vermillion section between two grey lines, which were quite superficial. The fetid odor exhaled by the patient had ceased to be perceptible after death."

"It was impossible to make a more imperfect investigation. To what a degree may prejudice blind the judgment! The prepossession in favor of the existence of a grangrenous affection prevailed over evidence. Although no excuse can justify the want of attention in so severe a case, where every thing demanded the most accurate investigation, some circumstances may at least explain the hurried nature of this autopsy, which was made in the middle of the night, in a confined place, and under the eyes of parents, whose sorrow inspired me with the fear that I had already carried my zeal for science too far."

"Doubt was the first result of this case. Indeed, how could gangrene be limited to such slender surfaces, and deviate in this respect from its habitual character? A disposition which was so peculiar to this epidemic affection required a new and especially a more severe investigation. There was reason to fear that the occasion would not be long wanting, for it was observed that the number of those who were dying of Gangrenous Angina was daily increasing. Children were particularly attacked by it, and at this age the disease appeared to be transmitted by contagion."

Another charm about M. Bretonneau's writings is the graphic manner in which his cases are described. The reader is irresistibly interested in their success or failure; his sympathies are all enlisted on behalf of the poor sufferers, and he alternately triumphs or mourns as the result proves fortunate or otherwise. The first case in which M. Bretonneau successfully employed tracheotomy, that of Mademoiselle L. de Puysegur, may be quoted in illustration of this statement; and we should not envy the feelings of that man who would not participate in the feelings that must have throbbed in M. Bretonneau's breast on restoring to the father, already bereaved of three children by this insidious disease, the fourth subject of it, after a prolonged struggle with death, and only saved by the skill, judgment, and dexterity of her medical attendant.

The symptoms of diphtherite are by this time too well known to our readers, and too ably described in the numerous memoirs that, both in this country and abroad, have appeared on the subject, to render it necessary for us to reproduce them here in detail; however, we should not be doing justice to our subject did we not allude to a sign laid down by M. Bretonneau in his fifth memoir, dated 1855, as pathognomonic of Nasal Diphtheria; we shall reproduce here in his own words:

"Under these circumstances, a minute and attentive vigilance is imposed upon us. When the Egyptian disease prevails and is propagated with the intermittent march which characterizes its irregular outbreaks, and when, from one year to another, it has raged so extensively as it has been seen do do in Paris within the last six years, it is incumbent on us not to wait for visible symptoms, but at the least sign of snuffling, at the slightest indication of coryza, to feel and not to look beyond the angle of the lower jaw, below the lobe of the ear, and thence down the sides of the neck. If in this region we should find any swollen lymphatic glands, our attention should be redoubled, for if we feel a glandular swelling, it is more than probable to be a consequence of the absorption of the Egyptian virus."

"Do not be satisfied with this examination, for it is necessary that the diagnosis should leave no doubt. Examine, therefore, the upper lip below the nostrils: in the most simple coryza the skin is reddened equally under each nostril, while in the case of the Egyptian disease it is only on the side of the glandular swelling. If the swelling exists on both sides, it is unequal; on the side where the swelling is least, the redness of the lip of the same side is least. From the period of this

discovery, we are certain that there is a special affection, in fact the Egyptian disease.

"Then let me advise you to act instead of talking, and with a glass syringe, the padded extremity of which ought to be yielding and incapable of causing pain, inject into the nostrils alternately a solution of nitrate of silver, and although the injection may flow back through the nostril which has not been injected, it will be well that the latter should also receive an injection of suitable strength, if, on the corresponding side, there is the least swelling of the cervical glands."

M. Guersant's memoir is devoted principally to that form of diphtheria represented by croup. He takes very proper objection to the confounding true with false croup, a mistake, we fear, but too prevalent even at the present day; the former, the pseudo-membranous pharingo-laryngitis, a most formidable disease, characterized by the formation of the diphtheritic membrane; the latter, the laryngismus stridulus, never presenting this complication. From his statistics we are entitled to augur favorably for the success of the operation of tracheotomy in this disease, he stating that—

"Out of one hundred and seventy-one cases of post mortem examinations in croup, one hundred and fifty exhibited false membranes in the air passages, and there were seventy-eight in which these false membranes were confined to the trachea, and only forty in which they penetrated to the bronchi. This result is very favorable, as will be perceived, to the success of tracheotomy."

But it is to the memoirs of MM. Trousseau and Bouchut that we are principally to look for important details respecting this operation. The advocates for tracheotomy in croup will derive some additional arguments to strengthen their position from the summary of M. Bouchut:

"Although the success of tracheotomy is not very striking, yet the results are such as ought to encourage its adoption by a physician placed in charge of an infant half asphyxiated by croup. On the one hand, M. Bretonneau, in twenty operations, saved six children; out of one hundred and sixy, I have saved forty-five. M. Leclerc, of Tours, who has adopted the same treatment, reckons one favorable case in two operations. M. Velpeau has cured two children in ten. M. Petel of Cateau Cambresis, who has followed the same system, has performed successfully three operations out of six which were operated upon. Thus out of one hundred and ninety-eight cases of tracheotomy we reckon fifty-seven cases of success; that is to say, rather more than a fourth."

The principal line of treatment advocated throughout all the memoirs is cauterization, performed either with strong hydrochloric acid (as urged by M. Bretonneau in his earlier memoirs), or with nitrate of silver. Emetics, mercury, and, when symptoms of asphyxia seem *imminent*, but previous to their development to any great extent, the operation of tracheotomy. Depletion, by the abstraction of blood, objected to by both MM. Trousseau and Bretonneau as being worse than useless, is admitted in exceptional cases by M. Bouchut; and when locally performed by the means of leeches applied in relays, as the urgency of the symptoms demand, is spoken highly of by M. Daviot. M. Bouchut, on the contrary, prefers general blood letting to leeches, stating that, in children, the operation of

venesection is more easily performed than the application of leeches—a statement in which we are not inclined to concur. He also alludes to the difficulty of stopping hemorrhage from leech-bites in the neighborhood of the neck—a difficulty which, we think, has been much overrated. It is true that, in the neighborhood of the trachea, you have no *point d'appui* on which to make pressure, but we always have it in our power to pinch up the leech-bite in a fold of the loose integument, and make pressure on it between our fingers; or, if a more protracted compression become necessary, we can easily extemporize a most effectual instrument, by employing a pair of small spring forceps, to be found in every surgeon's case, to open which it is necessary to press them. Envelop their extremities in a little pad of lint, to prevent their injuring the soft structures in this neighborhood; press the blades; the extremities divaricate; grasp the bleeding leech-bite with them, and allow them again to approximate by simply removing the pressure, and, from practical experience, we can promise our readers that they shall have no more trouble from the leech-bite. Since we have commenced employing this plan we never have had recourse to nitrate of silver, ligature, needle, or any other manœuvre recommended for the arrest of hemorrhage from this cause.

All forms of moist applications, in the shape of poultices, fomentations, etc., are deprecated as being worse than useless; purgatives also are not in favor; but blisters are especially indicated as being a fertile source of mischief, the blistered surface invariably developing pellicular inflammation, in other words, cutaneous diphtheria,—a subject, whether occurring in this manner or as an idiopathic affection, is always to be looked on as most serious, and to which full consideration has been given in more than one of these memoirs.

It remains now for us but to express our opinion as to the manner in which Dr. Semple has discharged the duty of selecting and translating these memoirs. Whilst admitting that those he has selected are of great interest and importance, we think that, on the principal of "audi alteram partem," he would have better consulted the interests of his readers, and at the same time rendered fuller justice to all parties, had he incorporated with the present memoirs some of those by equally distinguished authorities, in which a different line of treatment from that suggested in the present volume has been advocated. We would instance Lemercier, an advocate for active bleeding; Baron, the suggester of the alkaline treatment; Gigot, also a supporter of the alkaline plan of treatment, and an opponent of the use of caustics; Stiles, Heslop, and Haughton, supporters of the plan of treatment by muriated tincture of iron; Hutch-

inson and others, suggesters of the employment of chlorate of potash, etc., etc. As to the manner in which he has translated his authors into English, it has been done in such a manner as even to entitle him to the unqualified thanks of the writers themselves, presuming that their knowledge of the English language qualified them to be judges. We never have met with a translation so faithful which has so little the appearance of being one.

The work concludes with a most admirable bibliographical account of the disease, from the date of Bretonneau's first memoir on the subject up to the present year,—an account that bears equal testimony to the extent of his information as to the immense amount of industry and research expended on its preparation by its author, Mr. Chitto.

EPIDEMIOLOGICAL SOCIETY.

Dr. J. B. Sanderson read a paper entitled, "An Account of an Epidemic of Diphtheria."

The epidemic in question occurred in the small rural parish of Hertingfordbury, in Hertfordshire. This parish occupies a somewhat triangular space between the river Lea and its branch, the Mimeran, which unites with it immediately above the town of Hertford. The epidemic was confined to the village of Hertingfordbury, favorably situated on a gravelly slope on the southern bank of the river Mimeran, and to a few small hamlets on the elevated ground between the two rivers, where the slight inclination and the impenetrable nature of the subsoil are alike unfavorable to the removal of surface water. The outbreak commenced at the end of October, 1858, attained its acme early in December, and suddenly ceased towards the end of the year. Fifty-three persons were attacked in a population of 750, of whom 47 were children. There were 14 deaths, all of children under twelve.

1. *Characters of the Disease.*—Pain in the throat, generally inconsiderable, sometimes severe; either preceded by slight pyrexia or not; coryza occasionally preceding all other symptoms for some days.

Local Changes.—Fauces at first congested: membranous exudation, commencing on one, or both, tonsils, usually within twenty-four hours from onset, spreading *continuously* to soft palate, uvula, pharynx; forming, when first seen, a white opaque patch, with elevated edges, surrouuded by a narrow border of bright carmine. It is soft and inelastic, and can be easily detached, leaving an intensely congested, bleeding sur-

face, free from ulceration. It is capable of separation into layers, and consists throughout the whole substance of nuclei and nucleated cells, embedded in granular or dotted fibrine. The author inferred from his examination, that the membrane, when first formed, consisted mainly of cellular elements, the latter exudations containing more fibrine.

Condition Preceding Death in Fatal Cases.—In most cases countenance pale, skin cool, pulse rapid, and eventually so weak as to be imperceptible; no appearance of dyspnœa, the patient remaining in a condition of tranquil drowsiness, from which, however, he could easily be roused. In one or two instances, there were paroxysms of suffocation, with cyanosis and violent jactitation; extreme prostration during the remissions. The urine was found to be albuminous in most of the cases in which the necessary observations were made. Convalescence, slow; loss of muscular power of lower limbs; impairment of vision; complete paralysis of the velum palati, frequently persisting for some time after restoration to health in other respects. In the only post mortem examination which was made (no record was kept, and the author was not present,) the false membrane did not extend to the larynx. In this case there has not been the symptoms of suffocation.

2. *Causes: Drainage.*—In this respect there was a marked contrast between the village of Hertingfordbury and the other hamlets in which the disease prevailed; the former being dry, the latter damp and ill drained, the cottages being situated on patches of common land, soaking with moisture. Offensive emanations were observed in none of the dwellings, which were all provided with detached cesspool privies.

Water-supply.—All the cottages are supplied with water from wells from twelve to thirty feet deep. Owing to the diminished rain-fall during the autumn, these were dried up, or very low. A family, in which five children were attacked and four died, being supplied from a well in this condition, the water was examined. It was found to contain living crustacea, protozoa and protophyta, and vegetable organic *debris* in suspension, with organic impurity in the proportion of 5.2 grains in the gallon. As none of these conditions were either peculiar to the localities affected, or common to all of them, the author did not think that they could be considered of material importance, as determining the causes of the outbreak; and as regards the whole district, he maintained that it might be favorably compared with most rural neighborhoods.

Scarlatina and other Diseases.—Several children were attacked during convalescence from measles and hooping-cough. Scarlatina occurred, but did not prevail during the epidemic. In one fatal case of diphtheria, an eruption resembling that of

scarlatina appeared on the third day. No instances were met with in which children affected with diphtheria had previously had scarlatina. This the author attributed to the fact, that the latter diseases had not prevailed in the district for some time past.

That the disease was capable of *transmission by personal communication* appeared from the mode of progress of the epidemic. When one case appeared in a family, all the children were usually attacked, and there was no instance in which the disease invaded one family in a hamlet without extending to others. The origin of the epidemic could not be traced to this cause; but in the neighboring parish of Tewin, four miles and a half distant, the only two individuals attacked were in frequent communication with Hertingfordbury.—*Lon. Lancet.*

FROM THE PROCEEDINGS OF THE EIGHTH ANNUAL MEETING OF THE AMERCAN PHARMACEUTICAL ASSOCIATION.

The Committee on Home Adulterations, by Chas. J. C. Carney, of Boston, reported. Adulteration was defined, in the language of Dr. Hassell, of London—substitutions, impurities, and accidental contaminations being excluded—as "the intentional addition of an article, for purposes of gain or deception, of any substance or substances, the presence of which is not acknowledged in the name under which the article is sold." Great scientific skill is shown in many of the adulterations; in other cases the most pernicious articles are substituted for the genuine. A list of articles of food habitually adulterated, was given as follows:

Colored Confectionary—Adulterated with emerald or scheeles green, arsenite of copper.

Beer—with coculus indica and nux vomica.

Pickles and Bottled Fruits—with verdigris and sulphate copper.

Custard Powder—with chromate of lead.

Tea and Snuff—with the same.

Cayenne and Curry Powder—with red oxide of lead.

Sugar Confectionary—with gamboge, orpiment, or sulphuret of arsenic, and chloride of copper.

Flour and Bread—with hydrated sulphate of lime, plaster of Paris and alum.

Vinegar—with sulphuric acid.

Sugar—with sand and plaster of Paris.

Milk—with chalk, sheep's brains, ground turmeric.

Arrow Root—with ground rice.

Chocolate—with rice flour, potato starch, gum tragacanth, cinabar, bals. Peru, red ox. mercury, red lead, carbt. of lime, and the red ochres to bring up the colors.

Mustard—with ground tumeric, to give it a brilliant color.

Butter—with potato starch, mutton tallow, carbt. lead, and sugar of lead.

While the committee hesitated to give the names of the parties guilty of this practice, it was recommended that the Association should take some action in reference to the subject.

Some curiou sinstances of adulteration had come to the knowledge of the committee during the year.

During the past year, in a wood-turner's shop, in Boston, was seen more than a barrel of East India Rhubarb, which was being turned down into "true Turkey."

This rhubarb was sold for genuine and real Turkey rhubarb.

A druggist was applied to by a man for a situation as a porter in his store.

"What can you do? What have you been doing at your last place?" were the questions asked.

"O," replied the man, "I have done everything about the store that was needed, until the past year, I have worked up stairs in *the room* making Turkey Rhubarb."

"Making Turkey Rhubarb, what do you mean by that?"

"Why," replied the man, "we used to take the East India and *file* and *bore* it into true Turkey."

The man was not engaged.

The following list of drugs adulterated, was presented.

Acetate of morphia, is adulterated with acetate and phosphate of lime.

Benzoic acid, with asbestos, carbonate and sulphate of lime, hipponic acid and sugar.

Citric acid, with oxalic and tartaric acid and sulphate of lime. It often contains sulphuric acid and salts of lead or cop-

per. In 1850 M. Pennes discovered the presence of lead in this acid, obtained of three highly respectable dealers. The acid was very white, and was intended to prepare the purgative lemonade.

Tartaric acid, with cream of tartar, and sulphate of potassa and with lime.

Aloes, with colophony, ochre, extract of licorice, gum arabic, and calcined bones.

Starch, with carbonate and sulphate of lime or alabaster, the more common fraud is, however, to saturate it with moisture.

Arrow root, with potato starch and rice flour.

Assafœtida, with gum resins of poorer quality of sand, and other inert substances.

Balsam Copaiva, with the resinous extract by decoction of the bark of branches of copaisera, turpentine, colophony, and fat oils.

Balsam Peru, with colophony, turpentine, benzoin rezin, alcohol, and fixed oils.

Balsam Tolu, with turpentine, colophony and other resins.

Chloroform, with chlorhydric ether, hyphochlorous acid, hydrocarbonated oils, compounds of methyle and aldhyde, and fixed substances.

Beeswax, with resin, burgundy pitch, earthy pitch, flowers of sulphur, starch and amlyaceous substances, tallow, stearic acid, yellow ochre, calcined bones and sawdust.

Tart. emetic, with cream tartar, oxide antimony, tartrate of iron, chlor. calcium and potassium, and sometimes is contaminated with salts of copper and tin.

Essential oils, with alcohol and fixed oils.

Iodide potassium, with chloride of potassium and sodium, and calcium, carbonate of potassa and bromide of potassium. The latter salt being sometimes in so large a proportion, owing to its lesser price, as to *replace* almost entirely the iodide.

Manna, with glucose or starch sugar, and starch. The large flake manna is sometimes made from a mixture, consisting of a little manna, flour, honey, and a purgative powder; these are boiled together to a sirupy consistence, and then moulded in form of "flakes;" common "sorts manna" has been converted into "flake" by being boiled in water, clarified with charcoal, and moulded into proper form.

Disinfectants in Paris.—Ever since Messrs. Corme and Demeaux proposed sulphate of lime and coal tar as a disinfectant, purifying agents have been the order of the day. The merit of the discovery was of course at first disputed; and every one who thought he could contrive some disinfecting compound sent papers and samples to the Academy of Medicine or of Sciences. The last applicant is M. Boinet, well known by his works on Iodine, who, in a paper read on September 20th, before the Academy of Medicine of Paris, contends that the foulest sores can be rendered perfectly sweet by application of tincture of iodine. There will be no harm in trying this agent, which, no doubt, has already rendered great service.—*British Medical Journal.*

Tracheotomy—Importance of Position.—Mr. Hilton mentioned the case of a child six months old, which was said to have had given it by its mother a square piece of apple. Symptoms of suffocation appeared, and the child was taken to a medical man, who said the apple had passed into the trachea. On its being taken to Guy's Hospital, there were signs of obstruction in the right bronchus. Mr. Hilton found a square mass at the back of the mouth, which he imagined to be the apple, but which he could not move; and, the symptoms being urgent, he opened the trachea. There was much bleeding. Mr. Hilton turned over the child to prevent the blood from passing back into the trachea. On passing his finger into the wound, he found a piece of core of apple. He had no doubt that, in feeling the child's mouth, he had mistaken the posterior part of the cricoid cartilage for the piece of apple which was said to have been taken. He was satisfied that, by turning the child over, much difficulty was avoided. About ten days ago, the child was brought to him well, with only a slight difficulty of breathing.

Mr. Walton concurred in the importance of turning the patient in tracheotomy into the prone position.—*British Medical Journal.*

The extensive wholesale drug establishment of Wilson & Starbird, of this city, was destroyed by fire on the night of the 22d of October. The enterprising members of this house have made such arrangements that the usual business of the firm continues without interruption.

Semi-Monthly Medical News.

VOL. I. LOUISVILLE, KY., NOVEMBER 15, 1859. NO. 22.

Report on Epidemics of Kentucky, presented to the State Medical Society, in 1859. By W. L. SUTTON, M.D., *of Georgetown, Ky.*

NOTES AS TO THE TABLES.

Table I. contains a statement of the number of acres of land, compiled from the report of the Auditor of Kentucky, the number of improved and unimproved acres, compiled from the U. S. Census of 1850 (the Auditor's report gives 6,000,000 acres as the area of the State more than the Census—that amount possibly being held by non-residents—but does not give the quantity of improved and unimproved land, each of which also is doubtless more than stated in Census); the number of acres to each inhabitant; the average number of those dying annually, of each of the diseases named, and the proportion of deaths to the population of each county. But, in a few counties, but one or two had died of a particular disease, in five years. In such cases, one is put down as the annual average. In all other cases, the nearest number is used to avoid fractions.

In Table II. the annual average mortality of each county of the limestone regions is shown, and the average number of deaths from each disease, and the proportion of each to the whole number of deaths from ascertained causes.

Table III. shows the same facts in the coal regions. It must be observed, however, that in these, the springs and wells furnish, in some places, hard, and in some soft water; to what extent is unknown. In these two tables, the very large number of zymotics to the whole number of deaths, has induced me to carry the number to two decimals.

Then follows a series of tables, intended to elucidate the natural history of individual diseases, as cholera, dysentery, etc. In these, the influence of disease upon color, age, and sex, is indicated, as also the relative influence of each month on the disease. These tables are to be read thus: The first line of

white males refers to the year 1852, the second to '53, and so on to '56. The other divisions are similarly constructed. It is thus easy to compare the entire white, with the entire colored mortality, or the mortality of the sexes of either race. In estimating the relative mortality among the white and colored races, it is important to remember that in Ketucky there are about *seven* whites to *two* colored.

In noticing and comparing the Tables II. and III., we shall be sensible of some marked differences in the proportion of deaths from special diseases to the whole number of deaths from all causes. Thus, the mortality from cholera in the whole limestone region was 1 in 22, of all specified causes. Again, in the blue and coral limestone, it was 1 in 18, while in the cavernous limestone, it was 1 in 34, indicating that this disease caused a much larger proportion of all, in the blue limestone, than in the cavernous region. Again, the mortality from this disease in the coal regions was 1 in 32. But, when we compare the two coal fields, we see a mortality of 1 in 26 of specified deaths in the southern field, and 1 in 56 in the eastern, and a mortality in the limestone much greater than in the coal regions.

Again, if we take up dysentery, we shall find in the limestone regions a mortality of 1 in 7; in the blue, 1 in 10; and in the cavernous, 1 in 6. Here, the preponderance is in favor of the blue limestone. Again, when we go to the coal fields, we have a mortality of 1 in 5; in the southern, 1 in 6, and in the eastern, 1 in 4. Here, the mortality is greater in the coal region.

If we look to fevers—which include all fevers except scarlet and puerperal—we have, in the limestone counties, the proportion of 1 in 7; in the blue, 1 in 9; in the cavernous, 1 in 6. Again, in the coal fields, 1 in 6, the southern and eastern being equal. Again, a slight difference against the cavernous limestone, and also against the coal regions.

Again, if we investigate the ravages of scarlatina, we shall find the proportion of deaths from it in the limestone regions to be 1 in 27; in the blue, 1 in 22—and in the cavernous, 1 in 39; being quite an odds in favor of the cavernous, Again, if we turn to the coal fields, we shall find an average of 1 in 19—being 1 in 47 in the southern, and 1 in 10 in the eastern field. This is a very startling disproportion. This disproportion seems to have been occasioned by a severe epidemic of scarlatina, in a number of the mountain counties. It will be seen that in Knox county, the average number of deaths from scarlatina was 21, whilst the average number from specified causes was but 48. Again, in 1854, of 131 deaths from all causes, 98 were from scarlatina—these deaths from it being an excess

over all the deaths in ordinary years. In the same year, the mortality in the adjoining county of Laurel was very heavy, one-half of which was from scarlatina.

When we turn our eyes to the whole class of zymotics, and compare the different regions with each other, and the different counties with each other, we shall be struck at once with the very large number dying of this class of diseases, in proportion to the whole number of deaths; one death from this class to 2.15 from all causes being the most favorable proportion for any division, and 1 to 4.44 for any single county.

We dare not depend on our returns as giving anything like the number of deaths in the State, or from any county, or we might claim our State to be peculiarly healthy, and especially free from all other forms of disease, except those of this class. But even that view would show us to be great sufferers from zymotics. As it is, we must keep our judgment in abeyance untill we have more reliable returns.

In the blue limestone, 1 in every 2.15 died of the diseases belonging to this class; in the cavernous, 1 in 1.87, giving an average of 1 in 2.01 for the whole limestone counties. In the coal fields, the proportion was 1 in 1.67; 1 to 1.85 in the southern, and 1 to 1.47 in the eastern.

The eastern coal field is mountainous, a large portion very much so. Here, too, of necessity, the country is less cultivated, and the state of society less advanced; and here we find the largest proportion of deaths from zymotics. It may be, that this is largely attributable to the extensive prevalence of scarlatina in some of the counties. It is a fact, however, that the proportion of zymotic deaths is as large in counties where there was little or no scarlatina, as in those where it prevailed. Another feature in these tables is the great uniformity of proportion in the counties in each formation.

It may be well to remark that, in Table VII., under the head of continued fever, are included such deaths as were ascribed to typus, typhoid, and winter fever;* and in Table VIII. are included all that were thus returned, and that, doubtless, a large proportion properly belonged to Table VII.

I will add that, although I do not look upon croup as properly included in the zymotic class, yet as it is so placed, and as it is charged with a heavy mortality in Kentucky, I have been willing to take the pains necessary to construct the table.

* In making out the first five registration reports for Kentucky, "Winter Fever" was considered synonymous with Typhoid Fever, but it has been ascertained that in the southern part of the State (whence those cases come), that the name is equivalent to *Typhoid Pneumonia.*"

TABLE I.

Showing the population, the area, the number of acres of improved and unimproved land (digested from the Auditor's Report and the U. S. Census), the average number of acres to each inhabitant, the number of those dying of certain diseases, and of the class Zymotic, and the proportion of those deaths to the population of each county.

COUNTIES.	Population.	ACRES OF LAND.			To 1 inhabitant	CHOLERA.		DYSENTERY.		FEVERS.		SCARLATINA.		ZYMOTICS.	
		Whole No.	Improved.	Unimproved		Annual average.	Population to 1 death.	Annual average.	Population to 1 death.	Annual average.	Population to 1 death.	Annual average.	Population to 1 death.	Annual average.	Population to 1 death.
Adair	9,898	243,068	63,746	145,395	25	1	9,895	11	900	4	2,475	3	3,299	23	430
Allen	8,742	198,531	46,188	105,913	23	1	8,741	34	257	15	583	.....	.....	64	137
Anderson	6,260	106,383	43,208	35,303	17	6	1,043	6	1,043	15	417	6	1,043	44	142
Ballard	5,496	231,933	20,876	87,976	42	2	2,748	4	1,374	3	1,832	.....	.....	18	305
Barren	20,240	378.757	117,604	204,564	19	6	3,373	35	578	45	450	4	5,060	126	161
Bath	12,115	255,723	108,170	54,783	21	1	12,115	28	433	8	1,514	6	2,019	53	228
Boone	11,185	154,984	92,910	65,369	14	5	2,237	12	932	20	559	4	2,796	50	224
Bourbon	14,466	168,118	168,891	1,111	12	12	1,205	33	438	19	761	4	3,616	82	176
Boyle	9,116	107,905	53,717	43,151	14	2	4,558	8	1,139	6	1,519	1	9,116	20	456
Bracken	8,903	139,144	41,196	48,436	16	5	1,781	5	1,781	12	742	2	4,452	35	254
Breathitt	3,785	224,601	13,517	274,043	59	1	3,785	6	631	10	378	1	3,785	24	158
Breckinridge	10,593	328,038	67,822	181,745	31	4	2,648	9	1,177	15	706	1	10,593	59	179
Bullitt	6,774	171,490	50,144	111,734	25	13	521	5	1,355	15	452	3	2,258	42	167
Butler	5,755	222,018	26,272	112,896	39	5	1,151	10	575	18	319	5	1,151	50	115
Caldwell	13,048	190,863	69,713	182,549	15	1	13,048	11	1,186	24	544	3	4,349	57	229
Calloway	8,096	247,351	48,164	184,409	30	2	4,048	5	1,619	16	506	6	1,349	51	159
Campbell	13,127	87,876	27,009	33,111	7	8	1,641	10	1,313	10	1,313	11	1,193	72	182
Carroll	5,526	74,109	30,663	36,601	13	1	5,526	4	1,381	11	502	1	5,526	20	276
Carter	6,241	308,363	28,234	218,630	49	1	6,241	22	284	7	891	1	6,241	39	160
Casey	6,556	207,241	49,594	140,339	31	1	6,556	8	819	5	1,311	1	6,556	19	345
Christian	19,580	389,370	105,670	171,260	20	24	816	25	783	33	593	7	2,797	122	160
Clarke	12,683	187,331	153,096	17,056	14	3	4,228	11	1,153	11	1,153	4	3,171	39	325
Clay	5,421	235,008	19,186	137,006	25	1	5,421	9	602	8	678	2	2,710	26	208

Clinton	4,889	101,855	29,771	55,767	21	.....	.....	11	444	8	611	1	4,889	29	169	
Crittenden	6,351	180,037	34,016	103,958	28	1	6,351	14	454	15	423	1	6,351	40	159	
Cumberland	7,005	147,810	40,066	108,351	21	1	7,005	6	1,167	10	700	4	1,751	22	319	
Daviess	12,362	255,447	67,408	312,489	21	2	6,181	7	1,766	16	773	1	12,362	40	309	
Edmonson	4,088	152,067	20,027	75,294	37	1	4,088	9	454	4	1,022	.....	.....	16	255	
Estill	5,985	192,451	26,839	84,619	32	1	5,985	16	374	4	1,496	.....	.....	28	214	
Fayette	22,735	173,810	173,818	1,404	8	16	1,421	24	948	14	1,624	10	2,273	73	311	
Fleming	13,914	264,424	102,879	100,906	19	16	870	18	773	15	928	7	1,988	66	211	
Floyd	5,714	254,573	16,700	94,897	44	...	.....	5	1,143	3	1,905	1	5,714	13	440	
Franklin	12,462	119,861	61,895	52,969	9	2	6,231	11	1,133	21	593	4	3,115	51	244	
Fulton	4,446	102,813	17,672	44,948	23	9	494	13	342	9	494	2	2,223	27	165	
Gallatin	5,137	60,363	25,976	32,497	12	1	5,137	2	2,568	3	1,712	1	5,137	10	514	
Garrard	10,237	143,045	92,140	47,989	14	3	3,412	8	1,280	16	640	2	5,118	45	227	
Grant	6,531	146,977	40,544	74,839	23	2	3,265	3	2,177	3	2,177	1	6,531	10	653	
Graves	11,397	326,853	56,868	228,342	29	1	11,397	16	712	28	404	1	11,397	80	1,425	
Grayson	6,837	219,197	36,612	115,857	32	...	.....	21	326	15	456	4	1,709	55	124	
Green	9,060	179,986	61,323	114,576	20	1	9,060	23	394	19	477	2	4,530	53	171	
Greenup	9,654	302,215	30,008	111,396	32	1	9,654	18	536	12	804	1	9,654	36	268	
Hancock	3,853	97,406	17,775	44,274	25	4	963	4	963	8	481	...	.....	26	148	
Hardin	14,525	339,614	108,282	257,081	23	6	2,421	11	1,320	15	968	6	2,421	75	195	
Harlan	4,268	427,155	19,052	288,717	100	1	4,268	1	4,268	5	854	1	4,268	11	388	
Harrison	13,064	202,935	137,883	63,283	16	4	3,266	10	1,306	8	1,633	5	2,613	37	353	
Hart	9,093	206,026	47,659	135,584	23	2	4,546	27	337	31	296	1	9,093	76	253	
Henderson	12,171	284,256	70,432	160,711	23	7	1,739	11	1,107	22	553	2	6,085	62	196	
Henry	11,442	175,780	118,714	44,496	15	1	11,442	14	817	23	498	7	1,635	59	194	
Hickman	4,791	158,476	21,874	62,939	33	6	797	10	479	18	266	2	2,395	42	114	
Hopkins	12,441	369,355	70,065	204,441	29	3	4,147	53	235	22	566	1	12,441	91	137	
Jefferson	59,831	222,466	90,720	65,928	4	20	2,991	21	2,849	46	1,301	9	6,648	135	443	
Jessamine	10,249	106,040	65,485	42,304	10	8	1,281	9	1,139	7	1,464	3	3,416	36	285	
Johnson	3,873	163,765	15,094	110,382	42	1	3,873	9	430	6	646	4	968	27	143	
Kenton	17,038	94,452	41,616	36,915	6	11	1,576	13	1,311	13	1,311	9	1,893	70	243	
Knox	7,050	186,654	32,595	127,548	26	1	7,050	3	2,350	5	1,410	21	336	34	207	
Larue	5,859	154,272	32,961	75,335	26	1	5,859	17	345	10	586	2	2,929	41	143	
Laurel	4,145	242,406	22,759	152,864	58	1	4,145	8	518	8	518	7	592	32	130	
Lawrence	6,281	240,602	26,665	173,411	38	1	6,281	14	449	8	785	3	2,094	39	161	
Letcher	2,511	103,546	11,261	89,328	41	...	.....	5	502	2	1,255	...	.....	9	279	
Lewis	7,202	266,033	34,662	86,054	31	3	2,401	13	554	6	1,200	4	1,801	36	209	
Lincoln	10,093	178,556	90,094	77,288	18	6	1,682	17	594	7	1,442	1	10,093	39	259	
Livingston	6,578	159,756	26,902	96,758	24	2	3,289	6	1,096	19	346	3	2,193	41	160	

TABLE I.—*Continued.*

COUNTIES.	Population.	ACRES OF LAND.			To 1 inhabitant	CHOLERA.		DYSENTERY.		FEVERS.		SCARLATINA.		ZYMOTICS.	
		Whole No.	Improved.	Unimproved		Annual average.	Population to 1 death.	Annual average.	Population to 1 death	Annual average.	Population to 1 death	Annual average.	Population to 1 death	Annual average.	Population to 1 death
Logan	16,581	327,104	105,036	167,766	19	1	16,581	36	455	32	518	2	8,290	96	173
Lyon	.....	124,470	.....	.....	...	1	.....	8	.....	5	.....	...	.....	24	.....
Madison	15,727	203,123	149,164	102,331	13	3	5.242	24	655	16	983	2	7,863	63	250
Marion	11,765	200,487	86,959	125,741	17	1	11,765	28	420	14	840	1	11 765	66	178
Marshall	5,269	183,529	18,521	67,930	35	1	5,269	1	5,269	11	479	4	1,317	29	182
Mason	18,344	148,606	93,559	56,884	8	24	764	18	1,019	17	1,079	6	3,057	94	195
McCracken	6,067	137,350	16,477	56,399	23	2	3,033	4	1,517	14	433	6	1,011	35	173
McLean	.....	119,837	.....	.....	...	...	.....	7	.....	7	.....	1	.....	22	.....
Meade	7,391	176,690	40,366	80,573	24	2	3,695	6	1,232	15	493	3	2,464	39	190
Mercer	14,067	153,003	97,281	48,454	11	9	1,563	15	938	12	1,172	13	1,082	66	213
Monroe	7,756	171,807	43,662	91,922	22	1	7,756	23	338	14	554	6	1,293	49	158
Montgomery	9,903	174,427	99,296	121,970	18	8	1,238	27	367	10	990	1	9,903	62	160
Morgan	7,620	495,689	31,742	260,193	65	1	7,620	36	212	8	953	8	953	68	112
Muhlenburg	9,809	252,334	50,935	202,285	26	2	4,904	22	446	9	1,090	3	3,270	51	192
Nelson	14,789	244,821	112,574	96,702	17	9	1,643	15	986	27	548	3	4,930	78	190
Nicholas	10,361	144,099	57,092	49,908	14	3	3,454	6	1,727	6	1,727	1	10,361	19	545
Ohio	9,749	326,450	55,196	165,500	33	3	3,249	15	650	25	390	2	4,875	52	187
Oldham	7,629	108,288	59,490	30,406	14	3	2,543	5	1,526	10	763	2	3,815	28	272
Owen	10,444	212,162	64,755	95,840	20	4	2,611	4	2,611	7	1,492	2	5,222	22	475
Owsley	3,774	220,822	14,887	226,241	59	...	.....	11	343	5	755	...	.....	21	180
Pendleton	6,774	169,393	39,977	86,779	24	2	3,387	5	1,355	6	1,129	4	1,693	28	242
Perry	3,092	294,892	14,145	279,673	95	...	.....	6	515	6	515	...	.....	18	172
Pike	5,365	265,643	18,474	178,006	50	1	5,365	5	1,073	2	2,682	1	5,365	17	316
Powell	.....	127,780	.....	.....	...	1	.....	6	.....	2	.....	...	.....	12	.....
Pulaski	14,195	368,967	75,529	247,002	26	1	14,195	31	458	15	746	8	1,774	75	189
Rockcastle	4,697	152,254	25,938	73,463	31	1	4,697	13	361	5	939	...	.....	25	183
Rowan	.....	.....	.....	.....	...	...	.....	...	.....	2	.....	...	.....	2	.....
Russell	5,349	135,558	42,342	87,997	25	...	.....	9	594	10	525	1	5,349	30	178
Scott	14,946	170,337	126,756	27,684	11	4	3,736	15	996	14	1,068	2	7,473	49	305

Shelby	17,093	256,291	147,170	70,556	15	5	3,419	28	611	34	503	20	855	112	153
Simpson	7,733	120,521	45,296	72,419	16	1	7,733	37	209	5	1,547	...	.....	56	138
Spencer	6,842	114,141	77,496	39,319	17	4	1,711	5	1,368	6	1,140	1	6,842	20	342
Taylor	7,250	149,812	45,888	70,833	20	3	2,417	13	558	14	518	1	7,250	42	173
Todd	12,268	205,400	78,511	108,805	17	...	.....	15	818	11	1,115	4	3,067	47	261
Trigg	10,129	246,592	50,143	14,816	24	2	5,064	14	724	20	507	6	1,688	63	161
Trimble	5,963	89,993	37,287	38,002	15	2	2,981	4	1,491	8	745	1	5,963	22	271
Union	9,012	253,612	52,453	141,403	23	9	1,001	7	1,288	11	819	...	.....	34	265
Warren	15,123	300,514	91,307	155,325	20	5	1,890	38	398	22	687	3	5,041	96	158
Washington	12,194	186,469	102,441	83,802	15	9	1,355	25	488	22	554	2	6,097	66	185
Wayne	8,692	257,823	69,532	190,897	28	...	.....	24	362	11	790	1	8,692	43	202
Whitley	7,447	278,889	38,863	214,207	37	1	7,447	4	1,862	6	1,241	11	677	29	257
Woodford	12,423	120,883	108,828	7,347	9	5	2,485	9	1,380	13	956	3	4,141	41	303
Total	982,405	21,044,403	5,968,270	10,981,478	21	398	2,462	1,329	739	1,340	733	354	2,775	4,669	211

TABLE II.

Showing the Proportional Mortality from Certain Diseases in the Limestone Regions in Kentucky.

COUNTIES.	Average annual deaths from specified causes.	CHOLERA.		DYSENTERY.		FEVERS.		SCARLATINA.		ZYMOTICS.	
		Average annual deaths.	One to specified causes.	Average annual deaths.	One to specified causes.	Average annual deaths.	One to specified causes.	Average annual deaths.	One to specified causes.	Average annual deaths.	One to specified causes.
LIMESTONE, BLUE AND CORAL.											
Anderson	85	6	14	6	14	15	6	6	14	44	1.93
Boone	141	5	28	12	12	20	7	4	35	50	2.82
Bourbon	193	12	16	33	6	19	10	4	48	82	2.35
Boyle	44	2	22	8	5	6	7	1	44	20	2.20
Bracken	79	5	16	5	16	12	9	2	39	35	2.26
Carroll	41	1	41	4	10	11	4	1	41	20	2.05
Clarke	82	3	27	11	7	11	8	4	20	39	2.10
Campbell	151	8	19	10	15	10	15	11	14	72	2.10
Fayette	172	16	11	24	7	14	12	10	17	73	2.36
Fleming	133	16	8	18	8	15	9	7	19	66	2.02
Franklin	130	2	65	11	12	21	7	4	33	51	2.55
Gallatin	24	1	24	2	12	3	8	1	24	10	2.40
Garrard	109	3	36	8	14	16	7	2	54	45	2.42
Grant	21	2	10	3	7	3	7	1	21	10	2.10
Harrison	79	4	20	10	8	8	10	5	16	37	2.13
Henry	121	1	121	14	9	23	5	7	17	59	2.05
Jessamine	73	8	9	9	8	7	10	3	24	36	2.03
Kenton	143	11	13	13	11	13	11	9	16	70	2.04
Lewis	57	3	19	13	4	6	10	4	14	36	1.60
Mason	230	24	10	18	13	17	14	6	38	94	2.45
Mercer	157	9	17	15	10	12	13	13	12	66	2.38
Nicholas	36	3	12	6	6	6	6	1	36	19	1.90
Oldham	64	3	21	5	13	10	6	2	32	28	2.29
Owen	53	4	13	4	13	7	8	2	27	22	2.41
Pendleton	60	2	30	5	12	6	10	4	15	28	2.15
Scott	144	4	36	15	10	14	10	2	72	49	2.94
Shelby	256	5	51	28	9	34	8	20	13	112	2.29
Spencer	44	4	11	5	9	6	7	1	44	20	2.20
Trimble	59	2	29	4	15	8	7	1	59	22	2.68
Woodford	138	5	28	9	15	13	11	3	46	41	3.37
Total	3119	174	18	328	10	366	9	141	22	1356	2.15
CAVERNOUS LIMESTONE.											
Adair	46	1	46	11	4	4	11	3	15	23	2.00
Allen	109	1	109	34	3	15	7	.....	.....	64	1.70
Barren	220	6	37	35	6	45	5	4	55	126	1.76
Breckinridge	66	4	16	9	7	15	4	1	66	59	1.12
Caldwell	103	1	103	11	9	24	4	3	34	57	1.81
Christian	240	24	10	25	10	33	7	7	34	121	1.98
Cumberland	44	1	44	6	7	10	4	4	11	22	2.00
Edmonson	25	1	25	9	3	4	6	.....	.....	16	1.56
Green	92	1	92	23	4	19	5	2	46	53	1.74
Hardin	132	6	22	11	12	15	9	6	22	75	1.76

TABLE II.—*Continued.*

COUNTIES.	Average annual deaths from specified causes.	CHOLERA.		DYSENTERY.		FEVERS.		SCARLATINA.		ZYMOTICS.	
		Average annual deaths.	One to specified causes.	Average annual deaths.	One to specified causes.	Average annual deaths.	One to specified causes.	Average annual deaths.	One to specified causes.	Average annual deaths.	One to specified causes.
Hart	132	2	66	27	5	31	4	1	132	76	1.74
Larue	182	1	182	17	11	10	18	2	91	41	4.44
Logan	199	1	199	36	6	32	6	2	100	96	2.07
Monroe	69	1	69	23	3	14	5	6	11	49	1.20
Meade	69	2	34	6	12	15	5	3	23	39	1.77
Simpson	79	1	79	37	2	5	16	.....	.....	56	1.41
Todd	88	.....	.....	15	6	11	8	4	22	47	1.87
Trigg	126	2	63	14	9	20	6	6	21	63	2.00
Taylor	76	3	26	13	6	14	5	1	76	42	1.81
Warren	181	8	23	38	5	22	8	3	60	96	1.90
Total	2278	67	34	400	6	358	6	58	39	1221	1.87
In both	5397	241	22	728	7	724	7	199	27	2577	2.01

TABLE III.

Showing the Proportional Mortality of Certain Diseases in the Coal Fields of Kentucky.

COUNTIES.	Average deaths from specified causes.	CHOLERA.		DYSENTERY.		FEVERS.		SCARLATINA.		ZYMOTICS.	
		Average annual deaths.	One to specified causes.	Average annual deaths.	One to specified causes.	Average annual deaths.	One to specified causes.	Average annual deaths.	One to specified causes.	Average annual deaths.	One to specified causes.
SOUTHERN FIELD.											
Butler	91	5	18	10	9	18	5	5	18	30	1.82
Daviess	98	2	49	7	14	16	6	1	98	40	2.45
Grayson	91	.....	.....	21	4	15	6	4	23	55	1.65
Hancock	58	4	15	4	15	8	7	.....	.....	26	2.23
Henderson	134	7	19	11	12	22	6	2	67	62	2.16
Hopkins	127	3	46	53	3	22	6	1	137	91	1.51
McLean	43	.....	.....	7	6	7	6	1	43	22	1.95
Muhlenburg	78	2	39	22	4	9	9	3	26	51	1.53
Ohio	86	3	29	15	6	25	3	2	43	52	1.65
Union	77	9	9	7	11	11	7	.....	.....	34	2.26
Total	893	35	26	157	6	153	6	19	47	483	1.85
EASTERN FIELD.											
Breathitt	33	1	33	6	5	10	3	1	33	24	1.38
Clay	39	1	39	9	4	8	5	2	19	26	1.50
Floyd	22	.....	.....	5	4	3	7	1	22	13	1.69
Greenup	57	1	57	18	3	12	5	1	57	36	1.58
Harlan	13	1	13	1	13	5	3	1	13	11	1.18
Johnson	34	1	34	9	4	6	6	4	8	27	1.26
Knox	48	1	48	3	16	5	10	21	2	34	1.41
Laurel	53	1	53	8	7	8	7	7	8	32	1.69
Lawrence	61	1	61	14	4	8	8	3	20	39	1.56
Letcher	13	.....	.....	5	3	2	6	.....	.....	9	1.45
Morgan	99	1	99	36	3	8	12	8	12	68	1.46
Owsley	35	.....	.....	11	3	5	7	.....	.....	21	1.57
Perry	24	.....	.....	6	4	6	4	.....	.....	18	1.33
Pike	34	1	34	5	7	2	17	1	34	17	2.00
Whitley	44	1	44	4	11	6	7	11	4	29	1.52
Total	609	11	55	140	4	94	6	61	10	414	1.47
In both fields	1502	46	33	297	5	247	6	80	19	897	1.67

TABLE IV.—*Exhibiting the Color, Sex and Ages of those dying during six years, from* 1852 *to* 1857, *of Cholera, with month of death.*

COLOR.	SEX.	MONTHS.												Total.	AGES.												
		January.	February.	March.	April.	May.	June.	July.	August.	September	October.	November	December.	Unknown.		Under 1.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	Unknown.
White...	Males...	1	1	1	4	13	48	135	66	31	29	19	12	4	354	20	40	25	13	11	76	65	38	24	24	10	8	.....
		1	.....	.....	.....	1	5	1	5	1	3	.....	1	1	19	3	6	1	.....	.....	2	2	.....	1	1	2	.....	1
		3	.....	7	1	5	76	79	18	23	16	9	2	5	244	8	15	10	8	19	49	48	34	26	16	3	3	5
		.....	2	2	3	7	11	52	94	19	11	.....	.....	1	202	9	25	10	3	9	36	36	34	19	16	4	.....	1
		.....	.....	.....	.....	.....	.....	4	1	2	.....	1	.....	.....	8	2	1	.....	.....	.....	1	1	2	1	.....	.....	.....	.....
		.....	.....	.....	1	.....	.....	1	2	2	.....	1	.....	.....	7	3	2	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....
White...	Females	1	1	1	.....	10	31	83	37	21	13	5	.....	5	208	15	30	16	11	12	36	31	14	18	9	8	3	5
		1	1	.....	.. ..	.....	3	10	2	1	3	.....	2	.....	23	4	6	4	1	.....	.....	1	1	2	2	.....	1	1
		2	.....	1	6	5	39	43	20	4	11	5	1	2	139	7	13	10	8	7	23	25	18	7	12	4	2	3
		.....	1	2	2	.....	10	48	48	15	3	1	.....	1	131	4	28	10	2	11	20	15	14	10	9	5	1	2
		.....	.....	.....	.....	.....	1	2	1	.....	.....	.....	.....	.....	4	.....	1	.....	.....	.....	.....	.....	.....	2	1	.....	.....	.....
		.....	.....	1	.....	.....	1	1	2	.....	.....	.....	.....	.....	5	.....	2	1	.....	.....	.....	.....	1	.....	.....	1	.....	.....
	Total...	9	6	15	17	41	225	459	296	119	89	41	8	19	1344	75	169	87	46	69	243	225	157	109	91	36	19	18
Black....	Males..	.....	.....	.....	.....	3	15	34	12	9	14	5	.....	1	93	6	9	6	4	3	16	18	14	9	4	.....	3	1
		.....	2	.....	.....	.....	....	2	11	....	.....	.....	1	.....	6	2	2	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....
		.....	.....	1	2	3	25	33	10	10	7	8	3	1	103	4	7	7	4	4	17	17	13	15	9	3	2	1
		.....	.....	.....	1	1	5	23	63	7	2	2	.....	2	106	6	12	6	4	12	27	10	10	10	6	2	1	.....
		.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
		.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	2	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Black....	Females	2	.....	.....	1	2	9	21	6	8	5	2	1	3	63	4	8	4	6	3	10	6	6	7	6	2	.....	1
		.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		.....	.....	.....	2	1	22	28	10	4	6	1	.....	2	76	6	9	5	4	3	15	12	5	7	6	4	.....	.....
		.....	.....	.....	.....	1	2	13	32	7	2	.....	.....	1	58	6	9	5	2	4	8	7	5	7	2	1	1	1
		.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Total...	2	2	1	6	11	79	154	141	46	36	18	5	10	511	35	57	34	24	29	95	71	54	55	33	12	7	5
Both.....	Races..	11	8	16	23	52	304	613	437	165	125	59	13	29	1855	110	226	121	70	98	338	296	211	164	124	48	26	23

TABLE V.—*Exhibiting the Color, Sex, and Ages of those dying during 6 years, from 1852 to 1857, of Croup, with the month of death.*

COLOR.	SEX.	MONTHS.												Total.	AGES.											
		January.	February.	March.	April.	May.	June.	July.	August.	September	October.	November	December.	Unknown.		Under 1.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 & over.	Unknown.
White...	Males...	24	10	18	12	11	8	15	26	17	21	20	20	5	207	110	79	7	2	1	1	.....	.....	.....	.....	.....	.....	7
		16	10	15	8	8	14	7	13	13	19	15	23	2	163	95	53	8	.....	2	.....	.....	.....	.....	.....	.....	.....	5
		13	15	14	18	11	18	22	22	28	34	25	27	4	251	140	86	18	1	.....	1	.....	.....	.....	.....	.....	.....	5
		19	12	17	17	11	11	15	15	27	26	20	23	5	218	108	83	18	2	4	.....	.....	.....	.....	.....	.....	.....	3
		19	17	17	13	15	9	5	20	20	16	31	26	3	211	114	80	11	1	.....	1	1	.....	.....	1	.....	.....	2
		12	13	19	16	13	9	9	11	21	30	28	22	6	209	111	77	13	3	1	.....	.....	.....	.....	.....	.....	.....	4
White...	Females	9	18	7	9	9	7	8	18	16	22	20	18	4	165	75	70	10	1	2	.....	.....	.....	.....	.....	.....	.....	7
		8	13	11	7	10	13	16	7	12	16	18	15	4	150	67	58	17	4	.....	.....	.....	.....	.....	.....	.....	.....	4
		12	19	13	8	10	15	14	18	25	18	20	16	1	189	90	86	7	2	1	1	.....	.....	.....	.....	.....	.....	2
		12	17	9	12	8	12	4	6	22	16	26	20	1	159	62	68	18	5	.....	1	.....	.....	1	.....	.....	.....	4
		18	6	13	4	5	6	16	20	13	17	20	19	3	160	83	52	15	1	.....	2	1	.....	.....	1	.....	.....	5
		8	8	11	9	13	7	2	8	22	24	28	18	5	163	77	72	9	.....	2	1	1	.....	.....	.....	.....	.....	1
	Total...	170	158	164	133	124	129	133	184	236	259	265	247	43	2,245	1132	864	151	22	13	8	3	.....	1	2	.....	.....	49
Black....	Males..	1	2	6	5	3	2	.....	3	8	7	4	2	3	46	22	20	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
		4	6	2	5	7	1	1	1	6	2	1	.....	2	38	19	17	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
		2	1	6	7	7	7	4	1	1	5	6	6	4	57	24	23	5	2	.....	1	.....	1	.....	.....	.....	.....	1
		4	6	6	5	4	3	4	2	3	5	5	10	.....	57	26	22	8	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
		3	7	1	5	3	2	1	8	5	3	7	8	1	54	28	19	5	1	.....	.....	.....	.....	.....	.....	.....	.....	1
		1	4	4	3	1	3	2	2	3	2	2	6	3	36	22	9	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Black....	Females	1	.....	2	3	4	3	.....	5	2	3	4	4	.....	31	15	12	2	1	.....	.....	.....	1	.....	.....	.....	.....	.....
		2	3	1	3	1	3	3	2	2	3	4	7	2	36	18	14	.....	1	.....	.....	1	.....	.....	.....	.....	.....	2
		5	3	.....	5	1	8	3	3	4	4	11	4	3	54	20	27	4	1	.....	.....	.....	.....	.....	.....	.....	.....	2
		2	3	2	2	1	5	3	3	2	3	5	8	1	40	16	15	5	.....	.....	1	1	.....	.....	.....	.....	.....	2
		11	2	2	3	4	2	5	4	5	4	6	4	2	54	35	14	1	1	.....	.....	.....	.....	.....	.....	.....	.....	3
		2	2	5	4	2	2	2	5	5	3	5	2	2	41	18	19	2	1	.....	.....	.....	.....	.....	.....	.....	.....	1
	Total...	38	39	37	50	38	41	28	39	46	44	60	61	23	544	263	211	41	10	.....	2	2	2	.....	.....	.....	.....	13
Both.....	Races...	208	197	201	183	162	170	151	223	282	303	325	308	66	2,789	1195	1075	192	32	13	10	5	2	1	2	.....	.....	62

TABLE VI.—*Exhibiting the Color, Sex, & Ages of those dying of Dysentery in Ky. during 6 yrs., from 1852 to '57, with month of death.*

COLOR.	SEX.	MONTHS.												Total.	AGES.											
		January.	February.	March.	April.	May.	June.	July.	August.	September	October.	November	December.	Unknown.		Under 1.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 & over.	Unknown.
White...	Males...	5	6	6	9	6	17	125	274	189	82	49	15	14	797	97	290	147	69	34	49	21	11	22	14	13	10	20
		3	6	3	3	6	31	106	113	58	26	6	3	9	373	46	139	69	26	24	32	5	8	11	5	3	1	4
		8	7	8	8	11	55	154	213	182	155	94	33	28	956	127	381	150	82	35	55	31	17	24	24	14	12	4
		4	3	5	7	7	16	64	114	89	47	14	5	3	378	53	146	60	35	18	19	12	9	9	4	6	4	3
		.....	4	3	12	3	16	56	143	117	64	29	13	5	465	65	187	81	30	23	21	10	10	17	6	6	5	4
		.....	1	6	4	1	12	14	72	123	79	15	7	11	345	58	124	66	36	15	13	5	9	3	4	2	1	9
White...	Females	10	3	9	9	5	23	111	262	186	101	43	13	15	790	86	259	118	76	50	54	32	29	19	28	16	1	22
		5	6	6	3	5	14	106	118	65	28	8	3	6	373	38	115	53	35	32	31	17	17	23	4	5	1	2
		3	6	5	4	7	50	142	247	174	135	89	35	13	910	92	278	152	84	59	80	34	36	30	28	20	8	9
		4	4	4	6	5	17	45	128	81	51	19	9	5	378	36	137	48	30	21	26	17	20	17	11	7	4	4
		4	4	4	2	5	7	65	129	97	60	46	11	4	438	53	132	51	40	21	47	29	18	17	16	5	7	2
		2	1	3	5	2	4	13	70	103	68	14	2	9	296	38	112	47	16	13	15	14	8	5	7	8	1	12
	Total...	48	51	62	72	63	262	1001	1883	1464	896	426	149	122	6,499	789	2300	1042	559	345	442	227	192	197	151	105	55	95
Black....	Males ...	1	3	1	5	5	10	22	65	37	17	5	2	3	176	23	45	45	22	12	7	6	6	5	1	.....	2	2
		.....	5	2	1	.....	13	22	25	24	15	2	1	3	113	14	29	23	10	8	12	1	6	2	1	3	1	3
		5	1	6	4	4	4	43	43	44	34	22	4	9	223	27	53	60	23	18	10	5	3	5	5	1	5	8
		1	1	2	2	.....	6	18	33	29	16	1	.....	4	113	20	26	12	17	8	5	3	2	5	4	3	2	6
		1	1	.....	.....	3	6	4	36	23	15	5	4	4	102	17	22	23	7	6	11	5	2	2	2	2	1	2
		.....	.....	2	2	3	.....	2	12	25	11	1	1	.....	59	9	24	8	8	2	3	3	.....	.....	.....	.....	.....	2
Black....	Females	.....	1	1	1	1	3	21	37	37	12	1	4	5	124	18	31	32	10	8	9	8	1	2	1	.....	2	2
		1	4	3	1	1	11	27	29	12	5	1	.....	6	101	14	29	13	11	4	10	7	1	2	2	1	.....	7
		2	2	.....	2	3	12	31	47	22	30	11	1	8	171	21	42	36	17	5	16	7	5	8	2	3	4	5
		.....	1	1	.....	.....	2	12	15	20	9	3	.....	2	65	7	20	9	5	6	7	2	4	1	1	.....	.....	3
		1	2	.....	2	.....	2	10	17	19	8	1	4	3	69	17	18	12	6	3	3	1	3	.....	2	1	1	2
		2	1	.....	.....	.....	1	3	14	10	8	2	2	1	44	8	13	9	2	2	3	2	.....	.....	1	1	.....	3
	Total...	14	22	18	20	20	70	215	373	302	180	55	2	48	1,360	195	352	282	138	82	96	50	33	32	22	15	18	45
Both	Races....	62	73	80	92	83	332	1216	2256	1766	1076	481	172	170	7,859	984	2652	1324	697	427	538	277	225	229	173	120	73	140

TABLE VII.—*Exhibiting the Color, Sex, & Ages of those returned as dying of Fever (simply), in 6 yrs., from 1852 to '57, with mo. of death.*

COLOR.	SEX.....	MONTHS.												Total.	AGES.											
		January.	February.	March.	April.	May.	June.	July.	August.	September	October.	November	December.	Unknown.		Under 1.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 & over.	Unknown.
White...	Males ...	6	8	6	5	7	15	11	34	19	22	12	12	5	162	16	31	20	12	13	32	11	10	6	2	7	.....	2
		9	12	12	14	9	3	11	18	18	11	10	12	9	148	14	20	23	13	16	20	10	11	5	10	3	1	2
		5	5	7	8	2	7	18	22	24	17	19	17	3	154	19	31	18	6	15	23	13	4	8	13	3	.....	1
		6	8	7	13	17	16	21	35	46	33	12	9	.....	223	23	48	20	18	12	32	21	19	9	9	4	4	4
		4	3	6	5	7	4	12	22	26	11	8	8	.....	116	20	27	9	1	9	16	7	13	4	3	2	4	1
		3	4	7	5	3	10	3	10	16	22	12	10	.....	105	10	14	6	5	11	17	19	4	6	8	4	.....	1
White...	Females	12	6	10	11	7	5	18	23	31	18	19	14	12	186	18	30	13	12	25	42	16	16	8	4	6	1	5
		7	12	12	14	11	8	13	17	17	18	12	10	3	154	12	21	14	14	24	27	14	11	8	2	4	2	1
		4	11	9	9	9	6	21	18	32	27	22	17	5	190	18	30	17	14	12	40	16	14	9	13	5	.....	2
		8	8	8	13	20	7	10	27	34	31	8	10	2	186	21	30	11	13	17	25	22	10	14	11	7	3	2
		3	2	6	3	8	6	6	19	17	16	5	6	3	100	8	14	7	5	10	22	11	12	3	3	2	2	1
		7	2	3	7	8	8	5	11	15	14	14	19	2	115	16	20	11	7	6	25	12	5	3	4	4	1	1
	Total...	74	81	93	107	108	95	149	256	295	240	153	144	44	1839	195	306	169	120	170	321	172	129	83	82	51	18	23
Black....	Males ...	2	1	4	3	3	1	1	4	4	6	4	1	4	38	3	6	6	2	4	8	4	.....	1	.....	1	.....	3
		1	2	3	6	1	1	3	4	3	5	5	2	1	37	3	5	5	3	8	4	1	2	2	3	.....	.....	1
		3	3	2	5	2	2	4	10	4	9	1	3	2	50	6	10	4	1	6	13	3	6	.....	.....	1	.....	.....
		1	5	3	3	1	3	3	8	10	5	4	1	2	49	6	10	8	.....	2	9	3	2	2	3	2	.....	2
		5	1	2	.....	2	1	1	2	3	5	1	.....	.....	23	2	3	6	1	3	5	.....	1	1	.....	.....	.....	1
		2	1	1	1	1	1	.....	2	3	3	.....	3	3	21	1	2	2	2	1	5	2	2	.....	1	.....	.....	3
Black....	Females	2	5	4	.....	3	1	2	7	2	3	4	3	2	38	2	3	4	5	6	4	4	5	1	2	1	1	.....
		1	1	2	4	2	2	6	4	3	5	2	.....	2	34	1	3	3	2	4	7	3	5	2	3	1	.....	.....
		1	2	2	3	5	2	5	11	3	6	2	3	4	49	4	10	4	5	4	10	3	3	3	1	.....	.....	2
		1	2	3	8	1	3	5	5	9	7	6	1	1	52	5	9	11	6	7	8	4	.....	.....	2	.....	.....	.....
		.....	.....	1	1	2	.....	3	6	6	3	2	1	.....	25	5	3	1	3	3	5	4	.....	.....	.....	.....	.....	1
		1	1	4	3	4	1	4	4	1	4	4	2	2	35	1	8	6	3	.....	10	4	1	1	.....	.....	.....	1
	Total...	20	24	31	37	27	18	37	67	51	61	35	20	23	451	39	72	60	33	48	88	35	27	13	15	6	1	14
Both	Races....	94	105	124	144	135	113	186	323	346	301	188	164	67	2,290	234	378	229	153	218	409	207	256	96	97	57	19	37

TABLE VIII.—*Exhibiting the Color, Sex, & Ages of those dying of Continued Fever during 6 yrs., from 1852 to '57, with month of death.*

COLOR.	SEX.....	MONTHS.												Total.	AGES.											
		January.	February.	March.	April.	May.	June.	July.	August.	September	October.	November	December.	Unknown.		Under 1.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 & over.	Unknown.
White...	Males ...	17	23	23	26	18	16	23	30	51	46	30	38	11	352	16	24	20	27	47	96	39	35	22	12	4	2	8
		13	19	20	13	15	11	17	19	22	32	20	16	.....	217	8	16	16	13	33	70	21	12	10	7	4	2	5
		11	9	15	15	15	15	24	37	29	40	33	34	7	284	15	30	20	18	31	73	40	16	15	11	7	2	6
		10	11	12	19	9	12	19	37	27	54	21	15	5	251	5	21	17	17	41	73	29	16	13	11	6	1	1
		13	4	11	10	6	12	14	23	26	38	23	16	4	200	6	18	19	12	22	43	21	19	17	14	7	1	1
		9	6	6	19	9	14	9	18	16	28	21	17	2	174	6	12	10	13	16	47	23	22	9	6	6	.....	4
White...	Females	19	16	19	13	21	8	21	24	41	37	39	22	6	286	11	18	21	33	49	66	27	17	20	14	4	.....	6
		10	15	22	13	13	7	18	34	24	20	11	10	2	199	7	13	13	23	30	54	15	17	13	10	1	.....	3
		13	19	16	13	11	12	20	26	36	43	27	31	6	273	15	29	16	22	38	60	31	22	16	9	6	2	7
		4	10	10	17	12	16	25	28	42	33	8	14	2	221	5	16	17	21	35	55	21	17	16	11	1	2	4
		11	9	12	15	7	6	11	15	19	20	21	11	7	164	7	16	9	13	34	51	16	5	7	2	3	.....	1
		8	3	6	5	6	3	7	11	16	27	22	17	.....	131	2	10	10	12	21	30	26	4	7	5	2	1	1
	Total	138	144	172	178	142	132	208	302	349	418	276	241	52	2,752	103	223	188	224	397	718	309	202	165	112	51	13	47
Black....	Males ...	8	11	10	19	9	5	18	14	18	11	13	10	4	150	6	13	12	13	32	42	14	7	5	3	.....	.....	3
		8	4	5	3	9	6	5	8	3	8	4	4	7	74	2	5	10	7	11	19	8	5	4	1	1	.....	1
		8	4	10	1	9	3	4	10	7	12	12	6	2	88	2	4	4	9	14	28	15	7	.....	1	.....	.....	4
		3	5	4	2	5	4	6	10	12	8	6	5	.....	70	2	7	6	13	14	16	2	2	4	1	.....	.....	3
		4	3	.....	3	1	1	5	13	12	6	6	11	3	68	5	2	8	8	12	15	5	9	.....	2	.....	.....	2
		1	6	3	8	4	2	1	3	7	7	9	4	1	56	3	3	10	7	8	12	2	6	2	2	.....	.....	1
Black....	Females	15	11	8	14	7	12	16	9	12	11	12	9	1	137	7	13	15	26	27	20	14	8	4	2	1	.....	.....
		3	7	4	1	7	4	7	8	10	9	2	3	4	69	2	3	6	8	13	13	11	6	3	.....	1	.....	3
		2	5	3	2	4	5	7	6	10	8	5	10	1	68	3	6	5	8	15	15	9	3	2	.....	1	.....	1
		7	5	5	6	7	6	5	8	11	8	6	4	.....	78	.....	5	7	8	17	15	13	6	3	1	1	.....	2
		2	3	3	4	5	3	6	14	7	11	6	3	1	68	4	9	.....	9	15	12	8	2	2	3	.....	.....	.....
		5	2	.....	1	2	1	1	4	6	13	9	6	1	51	2	2	6	10	7	12	3	4	2	.....	.....	.....	3
	Total	66	66	55	64	69	52	81	107	115	112	90	75	25	977	38	72	93	126	185	219	104	65	31	16	5	.....	23
Both.....	Races....	204	210	227	242	211	184	289	409	464	530	366	316	77	3,729	141	295	281	350	582	937	413	267	196	128	56	13	70

TABLE IX—*Showing Color, Sex, and Ages of those returned as dying of Scarlet Fever, in six years, from* 1852 *to* '57, *with month of death.*

COLOR.	SEX.	MONTHS.												Total.	AGES.												
		January.	February.	March.	April.	May.	June.	July.	August.	September	October.	November	December.	Unknown.		Under 1.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 & over.	Unknown.
Whites..	Males ...	7	3	3	5	4	4	2	3	2	7	2	3	.....	45	6	20	17	.....	.....	1	.....	.....	.....	1	.....	.....	.....
		15	12	20	6	9	6	4	7	10	15	11	16	4	135	17	69	32	8	3	2	.....	.....	1	.....	1	.....	2
		17	24	19	12	13	10	9	13	12	15	18	22	4	188	26	106	38	11	4	.....	2	.....	1	.....	.....	.....	.....
		14	28	16	25	26	17	21	20	12	13	6	12	5	215	15	101	65	16	9	4	1	1	1	.....	.....	1	1
		7	2	10	10	5	12	2	13	14	15	16	11	3	120	15	88	20	3	6	5	2	.....	.....	.....	.....	.....	1
		18	11	15	21	10	6	7	11	10	15	17	26	5	172	26	75	48	10	3	3	.....	2	.....	.....	.....	.....	5
Whites..	Females	1	1	7	3	2	1	2	2	5	4	2	7	.....	37	5	19	8	3	1	1	.....	.....	.....	.....	.....	.....	.....
		7	20	15	11	9	6	4	6	6	7	16	13	1	121	14	57	34	7	5	2	.....	1	.....	.....	.....	.....	1
		22	19	15	11	17	14	11	12	11	16	21	22	4	195	23	93	47	18	7	5	1	1	.....	.....	.....	.....	.....
		20	19	27	25	32	14	13	12	15	18	9	9	1	214	16	93	51	23	7	7	7	1	1	.....	1	.....	7
		10	9	10	10	8	9	2	8	12	16	8	18	2	122	19	56	30	11	2	3	1	.....	.....	.....	.....	.....	.....
		7	8	23	17	10	9	12	13	27	18	14	30	2	190	19	87	54	15	4	5	2	.....	.....	.....	.....	1	3
	Total.	145	156	180	156	145	108	89	120	136	159	140	189	31	1754	201	844	444	125	51	38	16	6	4	1	2	2	20
Black....	Males ...	2	.....	.....	1	.....	1	.....	1	1	.....	3	1	2	12	2	6	2	.....	1	.....	.....	.....	.....	.....	.....	.....	1
		1	4	.....	.....	6	3	.....	1	1	1	.....	.....	3	20	3	10	5	1	1	.....	.....	.....	.....	.....	.....	.....	.....
		2	8	2	4	1	1	.....	.....	1	3	2	4	3	31	4	19	2	3	2	1	.....	.....	.....	.....	.....	.....	.....
		5	.....	9	7	10	.....	5	1	4	2	4	1	.....	48	6	24	14	3	.....	.....	.....	.....	.....	.....	.....	.....	1
		1	2	2	1	1	.....	.....	1	.....	2	4	5	.....	19	3	11	3	1	.....	.....	.....	1	.....	.....	.....	.....	.....
		5	7	.....	5	1	4	2	1	3	4	3	6	2	43	3	20	11	4	.....	1	.....	.....	.....	.....	.....	.....	4
Black....	Females	3	1	1	.....	.....	1	.....	.....	2	.....	2	3	1	14	1	2	6	1	2	1	.....	.....	.....	.....	.....	.....	1
		5	1	1	4	8	3	.....	.....	1	1	1	2	1	28	2	11	11	1	2	.....	.....	.....	.....	.....	.....	.....	1
		2	3	2	6	3	1	1	2	2	2	2	4	2	32	3	13	10	2	.....	1	1	.....	1	.....	.....	.....	1
		2	4	10	5	4	1	1	3	2	.....	2	2	.....	36	4	17	12	2	.....	.....	.....	.....	.....	.....	.....	.....	1
		.....	2	4	.....	3	3	3	1	2	2	4	3	.....	27	3	13	7	1	3	.....	.....	.....	.....	.....	.....	.....	.....
		6	.....	3	2	2	4	1	3	4	1	2	3	1	32	8	9	4	3	2	.....	3	.....	.....	.....	.....	.....	3
	Total.	34	32	34	35	39	22	13	14	23	18	29	34	15	342	42	155	87	22	13	4	4	1	1	.....	.....	.....	13
Both.....	Races....	179	188	214	191	184	130	102	134	159	177	169	223	46	2,096	243	999	531	147	64	42	20	7	5	1	2	2	33

TABLE X.—*Exhibiting the Color, Sex and Ages of those dying of Hooping Cough during 6 years, from 1852 to '57, with month of death.*

COLOR.	SEX.	MONTHS.												Total.	AGES.											
		January.	February.	March.	April.	May.	June.	July.	August.	September	October.	November	December.	Unknown.		Under 1.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 & over.	Unknown.
White...	Males...	7	4	7	11	7	11	9	4	5	12	9	9	1	96	37	43	11	1	3	.....	.....	.....	1	.....	.....	.....	.....
		6	2	5	1	3	3	3	4	10	4	7	5	.....	53	21	23	5	1	.....	1	.....	.....	.....	.....	1	.....	1
		3	4	8	7	5	.....	2	14	3	5	5	5	2	63	30	25	7	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
		1	2	4	.....	2	7	7	13	8	12	6	5	.....	67	26	34	5	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
		.....	2	5	.....	4	5	5	11	7	4	1	7	1	52	16	26	4	5	.....	.....	.....	.....	.....	.....	.....	.....	1
		1	4	4	2	3	1	3	1	3	5	6	3	1	37	14	16	4	1	.....	.....	.....	.....	.....	.....	.....	.....	2
White...	Females	6	4	9	8	7	5	11	14	14	9	8	11	2	108	55	38	10	2	2	.....	.....	.....	.....	.....	.....	.....	1
		2	4	6	6	3	1	10	10	6	4	4	2	.....	58	20	31	4	.....	1	1	.....	.....	.....	.....	.....	.....	1
		1	3	7	8	2	9	14	12	7	6	9	6	2	86	25	43	7	2	1	2	1	4	1	.....	.....	.....	.....
		5	6	6	5	3	7	5	12	15	9	8	3	1	85	21	51	8	2	.....	1	2	.....	.....	.....	.....	.....	.....
		3	4	4	7	5	4	7	12	6	7	7	7	3	76	39	25	7	.....	3	1	.....	.....	.....	.....	.....	.....	1
		4	.....	3	3	2	2	1	5	8	5	9	1	.....	43	18	18	3	2	1	.....	.....	.....	.....	.....	.....	.....	1
	Total...	39	39	48	58	46	55	77	112	92	82	79	64	13	824	322	373	75	16	11	6	4	4	4	.....	1	.....	8
Black....	Males..	3	3	3	7	4	7	3	1	8	4	5	6	1	65	22	29	8	1	2	.....	.....	.....	.....	.....	.....	.....	3
		5	2	2	.....	2	1	2	3	1	4	1	1	3	27	9	12	2	3	.....	.....	.....	.....	.....	.....	.....	.....	1
		2	3	6	2	.....	2	7	8	3	2	3	1	.....	39	14	19	1	.....	.....	1	1	.....	.....	.....	.....	.....	3
		.....	1	4	.....	4	1	6	4	3	4	2	8	.....	37	10	22	3	.....	.....	1	.....	.....	.....	.....	.....	.....	1
		.....	6	7	[illegible]	1	4	1	2	3	2	1	.....	2	32	13	12	4	1	1	.....	.....	.....	.....	.....	.....	.....	1
		3	.....	4	1	.....	.....	.....	3	2	.....	1	4	2	20	6	10	1	1	.....	.....	.....	.....	.....	.....	.....	.....	2
Black....	Females	2	1	10	4	5	4	5	3	5	5	6	4	3	57	19	24	7	2	1	1	.....	.....	1	.....	.....	.....	2
		3	3	1	3	.....	6	4	4	5	3	2	3	4	41	15	18	3	1	.....	.....	.....	.....	.....	.....	.....	.....	4
		.....	4	4	3	4	4	1	1	2	.....	2	2	1	28	9	12	2	3	1	.....	.....	.....	.....	.....	.....	.....	1
		1	2	3	2	6	2	2	1	2	6	5	7	.....	39	7	21	5	2	2	1	.....	.....	.....	.....	.....	.....	1
		1	3	6	3	4	8	6	6	3	2	3	.....	1	46	16	22	4	1	.....	.....	.....	.....	.....	.....	.....	.....	3
		.....	1	2	2	.....	1	6	2	1	1	4	2	1	23	5	14	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Total...	20	29	52	30	30	40	43	48	38	33	35	38	18	454	145	215	44	15	7	4	1	.....	1	.....	.....	.....	22
Both.....	Races...	59	68	120	88	96	95	120	160	130	115	114	102	31	1,278	467	588	119	31	18	10	5	4	5	.....	1	.....	30

A Report on Twenty-two Cases of Diphtheria. By Edward B. Bogge, Esq., M.R.C.S.E., &c., *Newthorpe.*

As it can not be deemed otherwise than desirable to increase as far as possible our acquaintance with the recent formidable epidemic of diphtheria, I hasten to bring my quota to the general stock by giving a few particulars of twenty-two cases which have fallen under my own notice.

The village of Kimberly, Notts, where most of the following cases have occurred, is chiefly composed of miners' cottages, closely packed, badly arranged, and worse ventilated. It is situated on a ferruginous, sandy soil, and is partly built on an elevation, and partly on what is emphatically called "the Flat;" and it is worthy of remark, that while diptheria was rife in the latter locality, and carrying off large numbers of children, only four cases came under my notice on the hill, and they all recovered. Moreover, in the cases that occurred in other villages, I invariably remarked the presence of coal-pit reservoirs, open drains, or stagnant pools in the immediate neighborhood of the houses where my patients resided.

All my patients were children, from four to nine years of age. Their parents were chiefly miners, whose good wages led them not to feel any *res angustæ domi* as far as abundant food and warm clothing go, so that I can not affirm that the children were badly nourished.

There was a wide spread epidemic of measles coincident with that of diphtheria, and the two diseases often attacked the children simultaneously or in succession. Where this was the case, I found that the child was generally first taken ill with the measles, and that on the fourth or fifth day of the fever (the eruption being profuse and fully out) the parents were first led to notice the presence of sore throat in the child by the sudden and alarming swelling and tenderness of the parotid and submaxillary glands, together with the manifest distress and often total inability to swallow solid food.

My treatment was the same in all my cases, so that its results may afford some estimate of its value. I had the patient removed to an airy room, and the ventilation made as free as circumstances admitted. I ordered the following mixture:—

Chlorate of potass, half a dram; tincture of sesquichloride of iron, forty minims; chloric ether, one dram; water, to two ounces: two drams four times a day (for a child five years old). I applied a solution of nitrate of silver (half a dram to one ounce) to the fauces daily. I also took a hint from a paragraph in *The Lancet* headed "Domestic Tubage of the Larynx," and directed the introduction of a dry feather into the fauces every two hours, which plan, I found, greatly relieved the child, by ridding it of a large quantity of the obnoxious deposit, and was, I am convinced, a most useful adjunct to other remedial measures. I was obliged to discontinue the use of hydrochloric acid internally, as I found it tended to increase the viscidity of the saliva, and so to add greatly to the discomfort of the patient. For diet, I ordered port wine every hour, warm milk, yelk of eggs beaten up in wine, strong coffee, beef-tea, veal-broth, white wine whey, and decoction blanche, with a liberal allowance of chloride of sodium in every kind of food. I am so convinced of the efficacy of this treatment, that were I ever to suffer from diphtheria, I should wish no other plan to be adopted in my own case.

A letter appeared in *The Lancet* some time ago, in which the writer expressed his belief that diphtheria was a sort of internal erysipelas. In reference to this point, I may remark that in Cases 21 and 22 of the table I ordered sinapisms, and a hot bath with mustard in it, and that in each case the use of these applications brought out an abundant crop of measles on the fourth day of illness, after which event the patients quickly recovered. I allude to this because I think the writer of the letter I mention may have been misled by a similar circumstance into the belief that diphtheria is *not* a specific disease. In the following table the column headed Duration includes the time between my first notice of the exudation and its disappearance:

TABULAR VIEW OF CASES.

Number.....	Sex.....	Type of Disease	Duration.....	Idiopathic.....	Coincident with Measles.	Termination...
1	Female...	Malignant.....	5 days.....	... 1	.....	Death
2	Male.....	Croupal.....	15 "	.....	... 1	Recovery
3	Female...	Malignant.....	12 "	... 1	.....	Death
4	Male.....	Croupal.....	8 "	.....	... 1	Recovery
5	"	"	5 "	... 1	.....	Death
6	"	"	5 "	.....	... 1	Recovery
7	Female...	Simple.....	5 "	.....	... 1	"
8	Male.....	Malignant.....	5 "	... 1	.....	Death
9	Female...	Simple.....	10 "	.....	... 1	Recovery
10	Female...	Malignant.....	7 "	... 1	.....	Death
11	Female...	"	12 "	... 1	.....	Recovery
12	Female...	Croupal.....	5 "	... 1	.....	"
13	Female...	Malignant.....	6 "	... 1	.....	Death
14	Female...	"	5 "	.....	... 1	"
15	Male.....	Simple.....	4 "	.....	... 1	Recovery
16	Male.....	Croupal.....	6 "	.....	... 1	"
17	Male.....	Simple.....	5 "	.....	... 1	"
18	Male.....	Croupal.....	5 "	.....	... 1	"
19	Female...	Malignant.....	9 "	.....	... 1	"
20	Female...	"	9 "	... 1	.....	"
21	Female...	Croupal.....	5 "	.....	... 1	"
22	Male.....	Malignant.....	5 "	.....	... 1	"

From this table it will be seen that—

1. The proportion of sexes attacked was 12 females to 10 males.

2. The relative frequency of the different types of disease was as follows: Simple, 4; Croupal, 8; Malignant, 10.

3. The average duration of the disease was 7 days, 15 days being the longest period, and 4 the shortest.

4. The average duration of the fatal cases was $6\frac{1}{2}$ days, the longest period being 12, and the shortest 5 days.

5. The number of idiopathic cases was 9, or 41 per cent.; and the number of recoveries was 3 out of the 9, or 33 per cent.

6. The number of cases occurring in connection with measles was 13, or 59 per cent.; in which 1 died, or $7\frac{1}{2}$ per cent.

In the 10 malignant cases 6 died, or 60 per cent.

8. In the 8 croupal cases, 1 died, or 12 per cent.

9. The total number of deaths was 7 out of 22, or 32 per cent.

10. Of the idiopathic cases, 7 were malignant and 2 croupal; so that it is evident that in idiopathic diphtheria the chances that it will be malignant are as 7 to 2, and the chances of death are as 2 to 1.—*Lancet.*

August, 1859.

Arsenical Poisoning—Good Effects of the Carbonate of Iron (Sesquioxyde).—*L'Union Medicale* of the 26th ult. gives an extract from the Italian Journal, *Il Filiotro Sebezio*, in which paper M. Trapani has published a case of poisoning with arsenic. After emetics had been freely used upon the four patients affected, who all presented the usual symptoms of arsenical poisoning, the indication was to give the hydrated peroxyde of iron, the efficacy of which in such cases is universally acknowledged. But it is not always easy to procure it. Hence it becomes important to ascertain whether other martial salts will act, to a certain extent, in the same manner. The carbonate of iron (or rather sesquioxyde, as the carbonate when kept any time, soon passes into this state) was here given with the best results.—*Ibid.*

Diphtheria Treated by Irrigations with a Solution of Common Salt.—M. Roche mentions, in *L'Union Medicale* of July 26th, that by this treatment he saved his patients in six cases of diphtheria. The false membranes were first freely cauterized with the lunar caustic, and injections then made every hour against the fauces with a solution of common salt, the strength of the solution being such as not to create nausea. Chloride of potash was also given internally; and tincture of iodine as a topical application, was used in half the cases: but M. Roche considers that the irrigations with the solution of common salt were the chief agents in the cure. One little girl was not cauterized at all. The author likewise holds that solutions of alum, chloride of potash, iodine of potassium, chloride of lime, etc., would perhaps be as efficacious.—*Ibid.*

Paralysis of the Pharynx and General Paralysis after Diphtheria.—M. Maingault lately read before the Medical Society of the Hospitals of Paris an important paper on the above mentioned affections. We find by the excellent report of M. Henri Roger, physician to the Children's Hospital, that M. Maingault, by collecting the cases published and adding his own, has been able to ground his essay upon fifty cases of

pharyngeal and general paralysis. These affections generally occur during convalescence of diphtheria, and are looked upon as unconnected with any lesion of the nervous centres. Recovery is the rule, and is promoted by steel, bark, sulphurous and saline baths, cold douches and stimulating frictions. In a few cases, special excitants of the nervous system, such as strychnine and electricity, have been found extremely useful. —*Ibid.*

Medicated Subcutaneous Injections.—Dr. Alex. Wood's method of injecting narcotic solutions into the cellular tissue is finding favor in France. M. Behier, an hospital physician of Paris, has made numerous experiments respecting this mode of removing pain, and has communicated the results to the Academy of Medicine.

The fluid injected in these experiments was a solution of sulphate of atropine, six grains to an ounce of water, which gives the proportion of a fiftieth part of a grain to every five drops of the solution. Fifty-three patients affected with various kinds of neuralgia, were injected close to the seat of pain with this solution; twenty-two others with a sulphate of strychnine, in the same proportions as had been observed for the sulphate of atropine. A solution of muriate of morphia was also injected in a case of slight lead colic. Pain was always relieved, and cures were effected in all the cases where the injections were sufficiently repeated—namely, in thirty-one cases out of fifty-three. Signs of Belladonna poisoning occurred in all, which was combated by opium.

M. Behier has tried to remove pain by injections into the cellular tissue at a distance from the seat of the uneasiness, so as to put the assertions of Mr. C. Hunter to the test, but always unsuccessfully. The same physician thinks that injections of medicated fluids into the cellular tissue afford very great advantages in cases of neuralgia and paralysis; and that these injections will yield the best results in other affections, where it is important that the medicinal substances should act upon the organism at large.—*Ibid.*

The Pulp of Raw Meat in Infantile Diarrhœa.—The *Bulletin de Therapeutique* of Paris lately mentioned this remedy, which was originally advocated by M. Pensa, in the *Gazette Medica Italiana.* It is efficacious principally in the diarrhœa which affects young children and those prematurely weaned. Raw mutton or beef is to be pounded, and then strained. The red fluid thus obtained is to be incorporated with jam or sugar, and administered in the shape of small bolusses. Two drams

and a half may be given the first day, and the dose may gradually be increased to thirteen ounces per diem (?). Every other kind of food is to be set aside, but the doses of the pulp should be diminished as the diarrhœa abates. When the looseness has quite disappeared, the meat may be replaced by beef-tea, boiled eggs, etc.—*Ibid.*

Strangulated Hernia Reduced by Kneading the Abdomen.—We mentioned last week a case of strangulated hernia reduced by large doses of infusion of coffee. This case has induced Dr. Laforgue, surgeon to the 40th Regiment of the line (France), to publish in the *Gazette des Hopitaux* of the 19th instant, a case of strangulated hernia, which he succeeded in reducing by placing the patient almost vertically, head downward, and then kneading the abdomen. Dr. Laforgue appends the following sensible remarks:

"It is logically clear that the strangulation would offer but little resistance if the operator could seize one of the ends of the strangulated knuckle, and draw it towards him in a direction contrary to the force which pushes the viscera out of the abdomen. When the patient is placed on a very inclined plane, pelvis downwards, according to the method of the ancients, or some of the surgeons of the last century, the intestines exert, by their own weight, a traction from above downwards. Now, by a regular and gradual kneading, it is possible to bring the intestinal mass to the umbilicus, and to push up the diaphragm and the abdominal viscera towards the chest, thus giving much energy to this power of traction, which may draw within the abdomen the viscera which had protruded. I consider this manipulation more rational and surgical than the taxis, the latter being certainly a very inferior means of reduction; as, besides being exerted on congested and painful tissues, it is rarely efficacious, causes much valuable time to be lost, and may increase the resistance of the ring by pushing the strangulated mass against it. Such substances as excite an energetic peristalic action, or great efforts at vomiting, act, according to my view, in a mechanical way; in fact, they bring about the internal traction which I obtained by kneading."

To these remarks we would add, that belladonna and acetate of lead, which have been found useful in these cases, probably act in the same way. It should, however, be carefully noted, that the relaxing effects of chloroform inhalations were not tried in the cases of M. Laforgue and others.—*Ibid.*

Occasional Danger of the Ophthalmoscope.—M. Desmarres states, in the *Gazette des Hopitaux* of the 9th ultimo, that se-

vere facial neuralgia was excited in a woman sixty-three years of age, by the use of the ophthalmoscope. She was affected with complete glaucoma of the right eye, and applied to the dispensary for facial neuralgia of the same side, from which she had been suffering for the last eleven years. The left eye seemed sound, but, on being viewed with the ophthalmoscope, it was found affected with the optical form of glaucoma described by Heger. Several medical men successfully examined the patient with much gentleness, and she complained neither of fatigue nor of being dazzled. But the eye became painful towards evening, and a neuralgic pain, of the same kind as had long existed on the right side, occurred on the left. The pain became intolerable on the following days; and, when the patient called again at the dispensary, all the symptoms of acute glaucoma were observed on the left side. M. Desmarres considers that an occasional cause of such an attack may be an ophthalmoscopic examination.—*Ibid.*

Obstetrical Society of London. *Wednesday, October 5th*, 1859.
Edward Rigby, M.D., *President, in the Chair.*

COMMUNICATIONS.

Induction of Premature Labor in a Case of Distorted Pelvis. By J. H. Trouncer, M.D. The patient had had eight children. The first three labors normal, children alive; in the fourth, turning and death of the children; in the fifth, the forceps was used, and the child born dead. The author attended her in her sixth labor; the result was as in the former case. In the seventh pregnancy premature labor was brought on at the eighth month, by means of an alternate injection of hot and cold water into the vagina, by use of a powerful syringe; the result was successful. In the next pregnancy (the eighth) similar means were adopted; but this time a long flexible tube was passed into the cervix uteri, and water was thus injected. In four days labor set in; the shoulder presented; the child was turned; but the chord was twisted round the neck, and the child's life was in consequence sacrificed.

Fœtus in which the Anterior Abdominal Wall was Deficient. By G. Hewitt, M.D. The elbow presented, and during the progress of the labor the protrusion of the intestines through the aperture in the parietes of the abdomen, covered only by peritoneum, was felt by the fingers, and produced an impression that the placenta was in contact with them.

Ovarian Gestation. By J. H. Davis, M.D. The patient, aged 25, never previously pregnant, began to suffer in March from severe abdominal pain, and above the right pubes was found a well defined enlargement, very tender to the touch. On the 14th of May, Dr. Davis first saw her, and found a large tumor extending to the umbilicus, and occupying chiefly the left iliac region, fluctuating, and resembling an ovarian tumor. Mammary symptoms of pregnancy, somewhat undecided and of doubtful import, were present; cervix uteri high up, inclined forwards; os not having the cushion fulness of early pregnancy; body of uterus a little enlarged; length of cavity, three inches and a half. Behind the cervix was a soft tumor, evidently continuous with that felt above. The diagnosis on this examination was that the tumor was of extra uterine character, and that within the cysts were fœtal contents. A canula and trocar were introduced into the tumor behind the cervix, and a quantity of fluid was evacuated; but the patient refused to allow of further projective operative measures, and died on the 9th of July. The left ovary was found developed into a cyst, situated between the uterus and rectum; the interior was sloughy and putrescent; it contained a decayed fœtus and remains of placenta, all of a dark color.

Polypus of the Uterus. By J. H. Davis, M.D. It was of about the size of an orange. He had removed it by means of the ligature and bistoury. The mass protruded from the vagina, and gave rise to considerable losses of blood and discharges.

The Hydatidiform, or Vesicular Mole; its Nature and Mode of Origin. By Graily Hewitt, M.D., M.R.C.P.

In this paper it was attempted to reduce the series of facts already on record in reference to the nature and mode of origin of the hydatidiform, or vesicular mole, into something like a system, and to offer a solution of certain questions not yet satisfactorily or clearly answered.

The author described a case in which a hydatidiform mole was expelled from the uterus seven months after the birth of a first child, and during lactation. The patient did not suspect her pregnant condition, but for about six weeks the milk had increased in quantity, and fulness of the lower part of the abdomen and constipation had been noticed. The ovum, expelled entire, was apparently about two months old, and offered a most perfect specimen of commencing hydatidiform degeneration. On cutting vertically through the whole mass, the following appearances were met with: the amniotic cavity was empty; no embryo was discoverable; the chorion and amnion membranes were adherent; about half of the chorion villi (the

whole of those corresponding with the decidua serotina) presented the hydatidiform change; the remainder were covered by the decidua reflexa, shrivelled and small. The chorion villi proceeded from the chorion membrane in their passage towards the decidua serotina, becoming enlarged at intervals into rounded bladder-like bodies, from one-sixteenth to one-sixth of an inch in diameter. Microscopic examination showed these vesicular bodies to possess the structure of normal chorion villi; but the cells on the surface were wider apart, and the villi distended by a serous fluid. The appearance did not differ materially from those described by Cruveilhier, Mettenheimer, Gierse, Wedl, and others.

What is the nature and cause of the change in the chorion villi, which results in the production of these hydatidiform bodies? Mettenheimer and Paget declare them to be cysts, while Gierse considers that the change consists in hypertrophy of the natural structures of the chorion villi, with secondary œdema. The "cyst" view the author considered positively disproved by observation of the specimen, and the drawings of the same produced, and by comparison of the altered villi with normal villi, at about the same period of development. In the normal villi and in the altered ones there are precisely the same structures; it is not, then, necessary to have recourse to a cyst theory to account for the appearances. The cells on the surface of the velli are seen alike in the two cases. The vesicular enlargements evidently do not originate in them, and Gierse's opinion as to the essential anatomical character of the change is far nearer the truth. In the hydatidiform mole we have, not a new formation, but simply an alteration and degeneration of previously existing structures.

What are the circumstances which determine this pathological alteration? Universally, the transformation has been supposed to be the starting-point; that the disease of the chorion was the cause; the death of the embryo the effect. Dr. Hewitt contended that the death of the embryo occurs first, the chorionic transformation subsequently. Death of the embryo involves arrest of chorionic development, but not necessarily cessation of vitality in the chorion villi. These may continue to grow, and this growth will form the hydatidiform mole. The middle or end of the third month is probably the limit within which the change can originate. Of the embryo, in most cases of hydatidiform change, not race is detected; when found, it is always very small. The author considered that in the case of the patient above described, and in cases like it, it was very probable that the death of the embryo was due to long sustained but slow contraction of the uterus, produced by the irritation of lactation. Dr. Barnes had found

that in a number of cases of abortion of non-special character, into the particulars of which he had inquired, abortion occurred in 17 per cent. of cases of conception during lactation, and in only 10 per cent. of other cases.

As to the possibility of a portion of retained placenta taking on the hydatidiform change, the following opinion was offered: The placenta of a mature fœtus cannot be so changed; but appearances, giving rise to an erroneous conclusion on this point, might arise: first, in cases of double conception, one of the ova perishing at an early period, and the degenerated chorion villi remaining in the uterus after the normal birth; and, secondly, in the perhaps possible case of a portion of the chorion villi having changed, from accidental separation from the embryo, the remainder growing normally.

The author was inclined to admit the possibility of the expulsion of true hydatid from the uterus. The true hydatids arise, doubtless, in the uterine wall, and subsequently burst into the cavity of the uterus. The fact that in true hydatids we find cysts enclosed one within the other, and in the other case round the oval bodies attached one to another, like beads, would be alone sufficient to prevent the possibility of a mistake in the diagnosis.

Dr. Barnes had observed a general tendency, in these cases, to complication with fatty degeneration. The usual absence of the embryo was accounted for by its undergoing oily transformation and dissolution, which usually proceeded to the entire disappearance of the fœtus. In one case he had witnessed this process in progress; the lower half of the embryo had melted away whilst the upper half remained. He was of opinion that it required further observations to establish the proposition that death of the fœtus must necessarily precede the hydatigenous change. Fatty degeneration certainly, in some cases, preceded the death of the fœtus; it might be that hydatigenous degeneration might also commence during the life of the embryo.

Dr. Druitt was ready to concur with the author in the position that the (so-called) cystic disease of the chorion was an exaggeration and deformity of natural structure. At the same time he doubted if the proof were complete that death of the fœtus was the only and essential cause. He expressed his belief that a kind of apoplectic engorgement of the decidual vessels was the condition which usually preceded abortion, and that the various changes of structure observed in the membranes of the ovum, such as fatty degeneration and fibrinous deposits in portions of the placenta, were generally secondary; yet in some such changes, he believed, were primary. It was an anatomical error to speak of the disappearance of any of the

villi of the chorion, whether of the placental or non-placental portion of that membrane. On the contrary, the villi of the whole chorion continue to grow up to the end of pregnancy, and are readily found in every mature ovum. They are particularly large around the placental portion, and in this part in the membranes at full term he had occasionally found them excessively ampullated, as if in the incipient state of cystic degeneration.—*British Med. Journal, October* 22.

OBSTETRICAL SOCIETY OF EDINBURGH.

Session XVIII.

Dr. Carmichael communicated to the Society the following case of

RUPTURE OF THE UTERUS BEFORE DELIVERY,

By Dr. Thom of Crieff.

On the 8th of July I was requested by Dr. Tait to visit Jane Marshall, aged 28, who had been in labor with her second illegitimate child for two nights and a day. I was informed that, on the morning of the 8th, the uterine efforts were very severe, and that suddenly "the pains" ceased. On examination I found the abdomen very tender, and above the umbilicus I was certain that I felt the feet of the child pressing too distinctly against the parietes of the abdomen. The head of the child, in a natural position, was well down in the pelvis, and the soft parts were quite relaxed. The liquor amnii had been discharged many hours before I saw her. The pulse was very quick and weak, her extremities were cold, and generally she presented symptoms of great exhaustion. After the administration of wine, and the evacuation of urine by means of the catheter, the forceps was introduced with no great difficulty, and the head of the child was gradually brought through the genital fissure. At this stage of the operation small teaspoonfuls of the liquor secalis cornuti were given in two doses. Considerable force was required before the shoulders were extracted. Dr. Tait kept a firm pressure on the uterus, which was contracted so much as to aid materially in the delivery of the feet, along with a quantity of dark-red fluid, and a few coagula. The exhaustion of the patient now required the administration of a considerable quantity of spirits. There was no hemorrhage. The placenta, by the aid of pressure and friction on the abdomen, and slight pulling by the umbilical cord, was easily removed. The patient expressed herself as being much relieved, but her extremities were cold, the pulse was very

feeble; the child—a male—was of large dimensions, and had not been felt to move for twenty-four hours before delivery, and there were no symptoms of life when it was born. The patient passed a more comfortable night than we expected. Beef tea and wine were given in such quantities as she could take them. On the third day after delivery, the bowels were moved by a dose of castor oil. The use of the catheter was required twice a day. She did not complain very much of pain in the abdomen.

She died after slight delirium on the morning of the 12th.

Dr. Tait and I examined the abdomen about eight hours after death. The peritoneum bore evident symptoms of inflammatory action. The intestines adhered to one another and to the sides of the abdomen, by recently formed lymph. The uterus filled the hypogastric region. At the lower and anterior part of that organ, we found a large diagonal, or semi-transverse rent capable of admitting all the fingers of one hand. This rent was quite distensible, and when the uterus contained the child must have been of large dimensions. The edges of the rent were of a livid black color, and the interior of the uterus presented the same appearance. A quantity of grumous fœtid fluid issued from the rent, and through the vagina, upon the floor of the room.

This patient was in poor circumstances, and had a very indifferent character. She had been recently employed in some of the neighboring woods, and had to lift and carry heavy bundles of the bark of trees. I am informed that her first labor, which took place in Glasgow, was very severe and protracted.

The head of the child was large and very firmly ossified, but there was no contraction of the pelvis to account for such a catastrophe as the rupture of the uterus.

ON THE NATURE OF SPURIOUS LABOR PAINS. BY PROFESSOR SIMPSON.

Various opinions have been expressed regarding the nature of spurious labor pains, some believing that they consist of morbid contractions of the abdominal muscles, others of the intestinal canal, and others of the walls of the uterus itself. The actual locality of the pains, and the varying degree of hardness in the uterine tumour during those pains, leave no doubt that the seat of spurious labor pains is in the walls of the uterus itself, and that they are produced, like true labor pains, by contractions in these walls. But the peculiarity of spurious pains seems to consist chiefly in the *direction* of the uterine contractions, and perhaps also to some extent in their local or limited character. In true labor pains the muscular contractions of the uterus pass from above downwards. We see this to be the fact in experiments upon the lower animals;

for when the abdomen is opened in the sow, for example, during active parturition, the wave of peristaltic uterine contraction, constituting a true labor pain, is *seen* to begin at the Fallopian tube, and to pass from thence downwards along the uterine walls to the lower extremity of the uterus itself. This phenomenon can be *felt* in the human subject during common labor by spreading out fully the thumb and fingers over the uterine tumor. When this observation is made, it will be found that as each true uterine contraction recurs, there is first a feeling of hardness, and, consequently, of contraction, felt beneath the finger or thumb placed at the highest point of the uterine tumor; and, secondly, this feeling of hardness and consequent contraction rapidly extends downwards in succession to the different fingers placed below. Sometimes a short series of thrills or vibrations in this direction are felt before the full and perfect contraction recurs. The observation can be made in some patients much more readily than in others, and particularly upon women in whom the abdominal parietes are unusually thin. When the same observation is attempted to be made in cases of well-marked spurious pains, it will be found that the contractions, instead of running from above downwards, proceed from below upwards, or from the os towards the fundus uteri. Occasionally, when they are slighter, they will be found lost on the sides of the uterus as they proceed upwards, or even stretch across in a limited form from one point to another. Usually, however, they consist of the peristaltic uterine contraction running in an inverted direction from below upwards, instead of, as in true labor pains, from above downards.—*Ed. Med. Journal, Oct.* 1859.

We have received the first No. of the Educational Monthly, published at this city, E. A. Holyoke, Corresponding Secretary and Resident Editor, assisted by an able Board of Collaborators in various parts of the State. No enterprises should claim, and we think we may with propriety add, *do* claim the sympathy and co-operation of our profession more than those intended to advance educational interests, either general or special. We can assure our readers that the "Educational Monthly" is a magazine worthy of their patronage. We have no doubt but that its visits will occasion the same happy commotions around numerous fire-sides that we have witnessed from the reception of its predecessor, the Kentucky Family Journal.

The following remarks of Prof. Holyoke will explain the character of the work:

"'The Educational Monthly.'—The Resident Editor would say, in the name of the Association, that it is not the object of this periodical to appeal exclusively to the teacher or provide matter solely for his consideration or instruction.

Education has a wider scope than the school; and, while it finds its peculiar sphere in the home on the one hand, is, on the other, compelled to seek a broader field in the world at large.

A work that claims to offer aid and counsel to those engaged in educating the young should address itself to the unprofessional as well as the professional teacher—should seek its readers in the workshop, the counting-room, the store, and the factory, as well as by the fireside or in the school-room. Such, we say, *should* be the sphere of an educational journal or magazine; but we must be contented with a narrower compass and a smaller auditory for the present, as men and women have not yet learned that they are all educators.

While, then, the original articles are mostly addressed to the teacher, or have some connection with the school, parents, at least, will find in their perusal much to interest them, much to give them light upon the various modes of instruction, much to teach them what many of our schools are, to show them what they ought to be. We shall, therefore, make no apology to the teacher—the agent—if we make frequent appeals to the parent—the principal.

Nor would we in an educational work forget any faculty or function of mind, body, or soul. The playground is as important as the school-room, the street as the parlor; the imagination needs training equally with the memory; the power to communicate equally with the power to investigate.

We trust that no one will condemn the children's story as too puerile, or the poetry as too light. It is easy to turn two leaves at once; and enough will be found that cannot be condemned as too low or too high. In fine, while it is our intention to provide good practical articles on school teaching and school keeping, on home influence and home government, we do not wish to fall into the error of sending forth a 'monthly' that ignores the existence of any spot but the school-room."

The Review of late publications on Diphtheria in our last No. should have been credited to the Dublin Quarterly Journal.

Hydrophobia.—The Academy of Medicine of Turin is at present investigating measures best suited to prevent the occurrence of this terrible disease. In France it was thought some years ago that the end would be gained by raising the taxes on dogs, and so diminishing the number. M. Lobligeois gives on this head some very interesting details. He states that, since the tax on dogs was established, the number of cases of hydrophobia have considerably increased at the Veterinary School of Lyons. He attributes the fact to the chaining up of the animals, and to the state of forced continence in which they are kept. "The fact," he writes, "of the immunity of dogs in Constantinople has been contested. M. Bernis, Head Veterinary Surgeon of the army in Africa, asserts that hydrophobia is not very rare in our colony in Algeria. M. Magne, Professor at Alfort, knew a well authenticated case. These two distinguished Veterinary Surgeons do not, however, furnish any document which invalidates the general assertion of M. Hamont. M. Hamont, who has directed for fourteen years the Veterinary School at Cairo, admits the existence of cases of hydrophobia in Egypt, but asserts that they are never observed except in European dogs, who have afterwards inoculated indigenous animals. In support of this assertion, M. Lobligeois cites a fact signalised in a letter addressed by M. Sacc, Professor at Wesserling, to the Society for the Protection of Animals. Hydrophobia is not known on the Mussulman bank of the Danube, where the dogs wander freely about, but it is not very uncommon on the Hungarian side in dogs of the same race, who are chained up in farms, etc." In consequence of these considerations, and of this asserted fact, that hydrophobia is excessively rare in female dogs, M. Lobligeois advises that owners of dogs should keep only bitches, or castrated males, or dogs of both sexes; and that if they choose to keep males, they "ought not to impose upon them continence, but leave them to indulge in their traditional *cynisme*, and not chain them up."—*Medical Times and Gazette.*

Remedy for the Bite of Mad Dogs.—A Saxon forester, named Aastell, now of the venerable age of eighty-two, unwilling to take to the grave with him a secret of so much importance, has made public in the Leipsic Journal the means which he has used for fifty years, and wherewith he affirms he has rescued many human beings and cattle from the fearful death of hydrophobia. Take immediately warm vinegar or tepid water, wash the wound clean therewith, and then dry it; then pour upon the wound a few drops of hydrochloric acid, because mineral acids destroy the poison of the saliva.—*Ibid.*

Semi-Monthly Medical News.

VO. I. LOUISVILLE, KY., DECEMBER 15, 1859. NO. 23.

Report to the State Medical Society of Kentucky, on the Effects of Vaccine Virus when Introduced into the Systems of Persons Exposed to Natural Variola. By H. L. GIVENS, M.D., *of Lagrange, Ky.*

Gentlemen of the Kentucky State Medical Society:

In reporting to you some statistical facts in relation to the effects of vaccine virus on the system of persons exposed to natural variola, I regret that I have not been able to collate as much information as I could desire on this point; yet, I trust, enough has been presented to elucidate the object of my inquiries as to the prophylactic powers of vaccine virus in arresting natural variola in systems already under its influence or in a state of incubation, thereby causing it to assume the varioloid or modified form, which uniformly runs its course without danger or the destruction of the cellular tissue, attended with disfiguration through life, which characterises the natural and much dreaded form of the disease. And I may here add, none are more interested, not only in the arrest, but in the entire extermination, as far as practical, of this pest to society and destroyer of the human family, than the physician, as it too frequently in its wake brings no bright laurels to wreath his brow, and in its train nothing but chagrin, disappointment, and mortification, with certain excommunication from society in private practice, by which he is at once shorn of a remunerative, if not a lucrative practice, and retires in disgust from the community in which he lived.

Not a few instances of this character could be cited, were it deemed necessary. Hence the importance of this subject to the practitioner, and the use of all the means which can be

brought to bear, be they ever so small, which may tend to check, modify, or arrest the blighting effects of this much dreaded disease. It is not to be disguised that there has been, for a number of years, a growing distrust, not only with the community at large, but also with the medical profession, as to the prophylactic powers of vaccine virus, in warding off or arresting natural variola when introduced in the systems of the community at large before exposure as a sanitive regulation or conservator of the general weal. If such be the views of many, how much more must the distrust be as to its conservative influence on systems already exposed and under the influence of variola, or, at least, in a state of incubation. That it has, to a considerable extent, more influence than is generally conceded, I will, without further preliminary remarks, cite a few insulated cases from reliable sources and experienced observers, with a case or two coming under my own observation, with such deductions as the facts justify.

Dr. Lyman Martin, of New Liberty, Owen county, Ky., an old physician of about forty years' experience, with extensive practice and high standing in the profession, reports me some interesting cases in point.

Case 1.—O. I., a young man who had been in Louisville and knew that he had been exposed to variola, was attacked about two weeks after with chill, pain in the epigastrium, aching in back and loins, with other symptoms usually the precursor of eruptive disease. He was confined with a family of eleven, several of whom were unprotected by vaccination.

On the fourth day of the attack, he vaccinated every member, two of whom waited upon the patient for three weeks, whose symptoms resulted in a severe case of confluent small pox.

None of the eleven contracted the disease.

Case 2.—A youth was taken with the usual symptoms of small pox; no suspicions existed of his having been exposed, but the indications were such that he advised the same caution as though he had been apprised of his exposure. He immediately vaccinated the whole family, protected and unprotected, but the matter proved to be inert, and five or six days elapsed before fresh matter could be procured, when he revaccinated all; and one of these was a little sister of the boy, who slept with him until the eruption made its appearance in full; and

nine days after the second vaccination, having had all the symptoms of genuine vaccine disease, as soreness of axillary glands, with a large indurated vesicle of the size of a twenty-five cent piece, which gave assurances that she would escape the disease, but, to his surprise, the next day, which was the tenth, she broke out very thick with three pustules running in the vaccine vesicle, but its course was suddenly arrested; and on the third and fourth day after it began to dry up and scale off, desquamation of the cuticle followed, and she was well before the boy.

Case 3.—A woman whose pustules were filling when seen by him. He immediately vaccinated the family, and only one took, a boy who slept in the room with the lady or patient. The rest of the family, though under the same roof, slept in an adjoining room. His impression is, that about five or six days elapsed after the first visit before he could procure fresh matter, with which he immediately vaccinated all the family, some six or seven in number, and the ninth or tenth day thereafter visited them again and found all well.

The above cases tell well of the prophylactic powers of vaccine virus by an experienced observer.

J. M. Moore, Esq., a highly respectable merchant of Henry county, informs me that when he had the small pox some years since, which left him badly pitted, and not knowing the nature of the disease until shortly after the eruption appeared, that not less than fifty persons were in his room, old and young, some of whom were frequently on his bed during the hight of the fever and the stage of the first appearance of the eruption, which was on Friday; and not until late on Saturday afternoon were they satisfied as to the nature of the disease; and on the evening of that day a little girl, a niece of his some four or five years of age, was on his bed, he caressed and kissed the child; she was vaccinated a few days after and escaped the disease. And all the others who had visited him, even a day or two after the eruption appeared, who had been vaccinated, save a portion of his family, which consisted of two brothers-in-law, his wife, and two small children, with a servant girl, all of whom had been vaccinated when young, save the two small children, and they were vaccinated on Tuesday, some four days after the eruption appeared; they remained in the room with

him. The vaccine matter took well on one of them, but on the other it had no effect; but on the eighth day after failure, it was again introduced by inserting it in a little sore on his thigh. It then took well, notwithstanding the two children had variola or modified small pox, with probably some thirty pocks on each of them, attended with only slight fever. One of his brothers-in-law, some ten or twelve days after the time he broke out, became affected or a little unwell, and some fifteen or twenty pocks appeared, but he was well in a few days; but the other brother-in-law, who nursed him all the time, escaped, also his wife, who slept in the same bed with him until the stage of maturation, she, with his brothers-in-law, having been vaccinated when young. The servant girl also escaped until they were all considered well, and then she broke out. There is no doubt she contracted the disease from washing some clothes of her master, on which some suppurative matter was attached, which was the impression of Mr. Moore, and is doubtless correct. Her indisposition was of but short duration, not even resulting in confinement; complaining but little; only two well defined pocks appeared, and those of large size on her forehead.

I will here remark that the above facts as communicated to me, may be implicitly relied on, as Mr. Moore maintains a high character for veracity, honor, and correct dealing.

These facts show the controlling influence of vaccine virus, especially in the cases of the three children. In the first cited, the disease, if contracted at all, or in a state of incubation, was entirely arrested or suspended; and in the other two, four and eight days respectively intervening after exposure to the variolous contagion before the introduction of vaccine matter, which took effect, controlling and modifying variola, and causing the disease to assume a mild type of the modified form.

Dr. J. C. Edwards, a highly rospectable physician of St. Charles county, Missouri, informed me last summer that in June, 1854, he attended a stage driver in an aggravated case of confluent small pox; that during his indisposition, and stage of highest excitement, and on the night in which the eruption appeared, a young man about sixteen years of age slept with him, and two negroes, a boy and girl, attended regularly in his room up to the day after the eruption appeared. Neither of

them save the white boy, had ever been vaccinated, and three or four days elapsed before he could procure genuine vaccine virus from St. Louis, with which they were vaccinated. It took well in each, and was attended with no symptoms indicating that they had contracted the natural variola.

Dr. E. D. Foree, formerly Professor in the Kentucky School of Medicine, and for years engaged in an extensive and lucrative practice in Jefferson county, has kindly furnished me the following cases, which have come under his notice and care:

Case 1.—Mrs. B., of Henry county, Ky., four days after her return home from a bridal excursion on the Mississippi river, was attacked with chill, high fever, violent pain in head and back, attended with nausea and vomiting. Three days after the ushering in of chill and fever, an eruption gradually appeared, though not seen by him until the seventh day subsequent to the eruption. The disease then having assumed the suppurative stage, and the pustules lost their umbilicated appearance, being sunk or flattened with a yellowish hue. From the beginning of the attack to the time of seeing her (viz.), some ten days having elapsed, all the family, some fifteen or eighteen in number, were all freely exposed, nine of whom had not been vaccinated. On the eleventh day of invasion, and eighth of the eruption, he vaccinated every member of the family, both white and black. All took the vaccine virus, save three or four, who had been previously vaccinated, and one little servant girl. No member of the family contracted variola or the varioloid, save the little slave girl alluded to, who had a severe attack of the confluent form, beginning about twenty days after the indisposition of her mistress.

The doctor here adds that two attempts to vaccinate this girl failed, which was unusual, as it took in all the others who had not been previously vaccinated; nor were there any symptoms in their cases of variola or varioloid.

Case 2.—On the 7th of October, 1850, Miss C., who had been sick some thirteen days, and had been under the care of a botanic doctor, who had diagnosed her disease black measles. She had been on a visit to Louisville, and ten or eleven days after her return, she was taken with the usual symptoms which characterize eruptive disease, which appeared on the fourth

day partially on the face, and the next day spread over the whole body, as detailed to him by an intelligent and observing mother. The disease when seen by the doctor was in the suppurative stage, and pustules very thick, which ran the usual course, terminating favorably, though leaving her badly pitted. During the whole of her indisposition, up to the time of being seen by Dr. F., some seven or eight brothers and sisters were freely exposed, remaining a greater portion of their time in the room with her; and one of her sisters was her regular nurse until relieved by a professional one from town, procured for the emergency; and not until the fourteenth day from the invasion of the disease, were the family vaccinated, only one of whom had previously been vaccinated. They all escaped disease, the vaccine virus producing the desired effect.

Case 3.—Mr. C., some thirteen days after assisting some Irish laborers in transferring their moveable effects from the cars into the railroad depot, and from thence into wagons, was taken sick April 19, 1853. I will here give the report of the doctor verbatim, with his comments as communicated to me: "I saw him on the afternoon of the same day; his fever was so intense, and pain in head and loins so agonizing, that I was quite at a loss in diagnosis. All the symptoms persisted without abatement until the morning of the 22d, when I found an eruption showing itself, and the general symptoms improved. The diagnosis was then clear; and upon that day I vaccinated his hitherto unprotected wife and child, who had been, and must continue during his attack, in his small and badly ventilated room. He recovered, losing an eye. His wife and child took the vaccine disease and escaped variola and varioloid."

He further adds: "Two of the foregoing cases, I think, possess some interest, as they show the power of vaccination to take the precedence in developing variola vaccina after the inception and probable incubation of variola for a number of days."

The following case or two which came under my observation and care, will tend still further to elucidate this subject:

I was requested, on the 4th of February, 1851, to visit the son of C. B. P., of Lagrange, æt. three years. He had the usual symptoms which characterise violent eruptive disease (viz.), high fever, pain in the head and back, with constant

nausea and freqnent efforts at emesis, attended with great tenderness of epigastrium and prostration of muscular strength, with slight coriza and mucous discharges from nares. When first seen, I could not learn that he had been exposed to contagion, but from subsequent inquiries I ascertained from satisfactory evidence that his father, about a fortnight prior to his attack, labored under the varioloid form of the disease, and that a few scattering pustules appeared upon his face and body, attended with some fever until the eruption appeared, and that his little son slept with him during his indisposition, and consequently must have contracted the disease from him, as the child was exposed to no other source from which the disease could be generated. And I shall here add that the father had been vaccinated a few years before, but being exposed in Louisville about a fortnight prior to his attack, he must have contracted the disease there, assuming the varioloid form.

On the afternoon of the third day of the child's indisposition, the family were visited by a near relative, with two children near the same age, both of whom frequently in the course of the afternoon and night fondled with and caressed the boy indisposed while the eruption was developing itself. They also slept in the same room during the night.

On seeing the case on the forenoon of the following morning, the fourth day of the disease, the eruptions gave clear indications of a case of small pox, which subsequently assumed the confluent form.

On apprising the mother of the two children visiting the house of the nature of the disease, she expressed much alarm, in consequence of neither of her children having ever been vaccinated. I immediately vaccinated both by scarification and puncturing the cuticle of the arm in two or three places, introducing some genuine vaccine virus under the cuticle, some twenty hours after exposure to the natural disease.

I was gratified to find on the 6th day that it was taking well in both the children. On the eighth both complained of thirst, with pain in the head and some fever, which subsided in a day or two, both being well on the tenth. The pustules filled well on both of their arms, but the youngest was rather better marked.

On the 4th day after exposure the elder boy began to com-

plain of pain in his head and back, with some nausea and fever on the 2d, 3d, and 4fh day, with partial insulated eruptions on the body, with a few scattering ones on his face. On their appearance the fever subsided, and the boy was not confined, save in the house. The other child entirely escaped, having no symptoms of the disease.

As soon as I discovered that the first child had the small pox, the other two were removed to another apartment, and were not permitted to see him again until convalescence ensued. This treatment consisted of the antiphlogistic plan and cooling regimen.

On the 21st of January, 1854, I was requested to visit G. W., a young man who had been frolicking about Louisville for a fortnight or more, and, shortly after returning to our village, he became seriously indisposed, with high fever, severe pain in head and back, flushed face, red eyes, and mucous discharges from nares. I anticipated an eruptive form of disease, though he averred that he had not been exposed to variola, as far as he knew. The family of the house in which he roomed being a large one of children, who were very fond of him, and frequently fondling around him, and in his room up to the time the eruption made its appearance. Some of the children had been previously vaccinated—others not. All of them were immediately vaccinated, but the matter proved to be inert from age, and five or six days intervened before genuine vaccine virus could be procured, with which they were all vaccinated again. It took in all who had not been previously vaccinated, servants included, who waited in his room. Nor did any of them give any indications of having imbibed the natural variola, or if contracted, or in a state of incubation, it was entirely suspended or arrested by the vaccine virus. This case was an aggravating one of the confluent form, terminating favorably, but leaving him badly pitted.

The chief and important points in a practical view, which I infer, as demonstrated by these insulated cases, are:

First. That notwithstanding the exposure of persons not vaccinated to the natural variola, and the contraction of the same, yet from five to seven days may elapse, and even longer, according to some of the cases cited by Dr. Martin and Dr. Foree, before the introduction of genuine vaccine matter,

which will still suspend, arrest, or modify the natural variola, and cause it to assume the varioloid form, which is uniformly mild, does not disfigure, and runs its course in a short time without danger.

Secondly. We may further infer that the system is more susceptible to the vaccine virus than the natural variola, as the number of cases reported by the above named gentlemen abundantly demonstrate, exclusive of those communicated to me by Mr. Moore, or those cited by myself, and as one of those coming under my own observation did not contract at all, or if contracted and in a state of incubation, it was entirely arrested, resulting in no indications of fever or external disease. And with the other it was caused to assume the modified form, resulting in but little fever, and but slight eruption. Nor does the insulated case of failure cited by Dr. Foree militate against these deductions, as anomalous cases of this character casually occur doubtless from some peculiar habit of the system at the time. Hence we may infer that in the use of the vaccine virus we have a sure and certain prophylactic in arresting and mitigating the virulence of this loathsome disease, even days after exposure.

As no cases have been communicated to me sustaining the insulated case cited by myself as to the communicability of small pox from the varioloid disease, and with the view of elucidating and sustaining those views more fully, it will, I trust, not be out of place to quote a case or two reported by A. W. McDowell, M.D., of New Jersey (in the American Journal of Medical Sciences for October, 1857, p. 353). The first case as reported by him being mild, he mistook it at first for chicken pox, having several cases of that character under treatment. The second case, being more aggravated, he reports at length, which I deem unnecessary to insert here; but case third, he adds, "working for the last named gentleman, who is an extensive farmer, were two black men, who, with their families, live in a house a short distance from the gentleman's dwelling. One family consisted of the husband, wife, and four children; the other family of a man and his wife. Of the children, two were vaccinated and two were not. Of the other family, the wife was unprotected.

"The black woman with the family washed the last shirt

worn by the first patient. To this shirt some scabs must have adhered. After washing the shirt in warm soapsuds, she washed the children's clothes in the same water. The next Sunday she put clean clothes upon the child unprotected.

"On the 21st this child broke out with genuine small pox. On the 23d it showed its true character. This child had never been to the house. It caught the disease from the clothes. The other child not having clothes on just from the wash, did not break out at that time. The disease ran its ordinary course, and the patient got well.

"Cases 5 and 6.—In two weeks time from the commencement of the eruption in the last mentioned case, two others broke out with the small pox. The other unprotected child and the man's wife. I vaccinated both, but without effect. They both had small pox and recovered. As they had but one room in the house for each family, the children that were vaccinated were in the same room with those that were sick, and were exposed to the contagion. They remained perfectly well. The mother of the children had been vaccinated several years before, and took care of the children. She had a slight rash upon her—was somewhat unwell, but did not get down. The husband of the black woman that had the small pox was vaccinated twelve years before. He took the sole care of her, and was well all the time.

"On the day the first mentioned child broke out, there was a black woman with her child visiting there. They were both unprotected. I vaccinated them. The ninth day of vaccination was the fourteenth of exposure. When the second patient broke out with the small pox, I lost a few days by not having good vaccine virus, but vaccination obtained the victory. She had a few pocks and some fever, but some epsom salts soon cured her. The child remained well."

The doctor here adds in his comments on these cases, that it is not necessary to vaccinate every seven years as some contend; and that vaccination will check small pox, even after exposure to contagion, provided the virus has time to enter into the system. His other cases and comments are interesting, but are unnecessary to report, save that he further adds in conclusion that the varioloid in the unprotected produces genuine small pox, thus showing the identity between it and

small pox. And lastly, vaccination proved itself in these cases all it has been represented, namely, if fully in the system it will completely preserve from the small pox.

The above cases speak for themselves, and do not require any comment from me, as the judicious observer from whom they emanate has made the natural deductions.

I will just remark in conclusion, that I had collated a few statistical facts bearing on the subject of general vaccination, but as they are known to each and all of you by reference to the standard practical works and periodicals of the day, I deem them uncalled for on the present occasion. But could I add a word which would tend in ever so small a degree to dispel this distrust and want of confidence which has been brooding for a long time in the public mind, as to the prophylactic powers of vaccine virus (I will not add the profession, for, with some few exceptions, they are better informed on this subject), I would be more than gratified. The failure frequently resulting from vaccination doubtless proceeds from the introduction of spurious matter. "The genuine scab," Professor Chapman informs us, "is of a hard, compact, dark mahogany color, with a regular well defined margin, while the pale greyish scab, scaly or lamellated in its structure, with ragged edges, is always spurious, and liable to fail; or, if it infects, produces an illegitimate disease, impotent as to any security against small pox." Hence the importance of procuring genuine vaccine virus, taken from known healthy subjects, or from the udder or teat of the cow when known to be genuine, which is uncertain in its development, occurring at long and irregular intervals, consequently it cannot be procured in cases of emergency. Whilst by some it is considered more active, others take a different view. Professor Thompson, of Edinburg, Marshall, of London, Griva, of Turin, and last, though not least, Dr. Watson, in his practical work, affirmed, while Senior Physician of the National Vaccine Board, that lymph transmitted from person to person from the time of Jenner, continued to generate as fine a cow pox vesicle as at first. Hence the importance of keeping up a regular supply by frequent vaccination in passing from one healthy subject to another, and seeing that none but such is used, the propagation of which is of vital importance to the community at large.

And while on this subject, having just received a few lines from my friend, Professor Lewis Rogers, of Louisville, whose experience and reputation as a practitioner are known to you all, though not strictly in place, I may be permitted to quote his views. He adds: "I have unqualified confidence in the prophylactic powers of genuine vaccine virus. Used according to the rules insisted upon by Jenner and others, it will as certainly prove preventive of *small pox* as *inoculation*, or an attack of small pox contracted in the natural way."

He further adds: "Variola often occurs in those who have been vaccinated," but, according to his observation, less frequently than is stated in the books, and in a milder and less fatal form than when the system has been protected by a previous attack of variola, and that the subject of revaccination demands more attention than it has received in this country. As to the influence of vaccine virus after exposure to variola, he adds: "In a number of instances, how many he cannot say, in both children and adults, he has introduced the vaccine virus after exposure to the poison of variola, with the effect, in a large proportion of cases, of complete protection. In all of the cases vaccination was promptly resorted to within one to two days after exposure."

The above observations and experience of the Doctor, tend to still further confirm the prophylactic powers of vaccine virus on persons exposed to variola.

The mode or manner of introducing the vaccine virus in the system is known to you all, and requires no repetition from me; but I may be permitted to add that it is the duty of each member of the Kentucky State Medical Society, not only to countenance, but extend his aid and influence in his respective locality in the propagation of genuine matter, especially to the unprotected, and revaccination in those of long standing, by which a general system of vaccination may be established. By so doing, I doubt not, public confidence in its remedial and conservative influence will be confirmed and strengthened, and this much dreaded, loathsome, and fatal disease will be banished to a great extent from society and our land.

My chief object in this communication is to confirm and strengthen the public mind, as far as practicable, in the prophylactic powers of genuine vaccine virus. Trusting it may act

as an incentive or stimulus to a general propagation of the same, and that without delay, for delays are dangerous. Should it have ever so small a bearing in achieving so desirable a result, my object will be accomplished.

MEDICAL SOCIETY OF LONDON.

Monday, October 24th, 1859.

Deodorisation of Ulcers.—Mr. Weeden Cooke referred to the discussion which has recently taken place in Paris, on the effects of mixture of sulphate of lime and coal tar as a deodoriser. He thought more had been said regarding it than it deserved; at the same time, as cleanliness was an important indication in the treatment of ulcers, it might be well to notice the subject. He had had many foul ulcers under his care, and had used the preparation; he found it to cleanse the wound, but at the same time it was liable to produce much inflammatory action. There are two classes of foul ulcers; in one class, the fœtor arises from the pus and discharges, while in the other the foulness arises from the presence of a slough. The preparation of gypsum and coal tar is useful in the former, but in the latter it has no effect on the slough. A lotion of chlorate of potash is a very agreeable and effective means of cleansing a foul ulcer, and for sloughs, nothing is to be compared to the "manganese with potash." A little of this sprinkled on a piece of cotton wool or lint, and applied, at once dries up the slough, which comes off in twenty-four hours; after this the chlorate of potash lotion may be applied. The smell is removed with the detachment of the slough by the manganese with potash, but returns when another slough appears.

Dr. Routh had had cases of foul ulcer under his care, especially cancer of the uterus. He had found in these cases that the smell returned after the removal of the slough. With regard to the mode of action of the coal tar, he observed that the smell of cancerous ulcers probably only arose from a kind of fermentation, and was capable of being stopped by substances which arrested fermentation. He had found a saturated solution of tannic acid very useful in correcing the character and odor of unhealthy ulcers; the improvement produced, however, was only temporary.

Dr. James Bird had had large opportunities during service in India. The continuance of the ulcer here depended on the amount of the surrounding inflammation, and the indications were to reduce the inflammation and to prevent absorption of noxious matter from the surface of the ulcer. In India, he had

employed common nitric acid, diluted according to the extent and depth of the slough. He had also used tincture of perchloride of iron; but the application is very painful. This was also found by the French army surgeons in the Crimea.

Mr. De Meric thought that two kinds of ulcers were confounded in the discussion. There was a great difference between an offensive slough lying on an ulcer and an ulcer yielding an offensive secretion. A slough must be removed, and at the same time it may be possible to change the character of the ulcer. There may be ulcers with no slough, but a smooth surface, and which may yet be phagedænic and very offensive. In these, he considered that the preparation mentioned by Mr. Cooke might be of great value to deodorise the secretions. In applying a disinfectant, it is necessary to take great care that it has not an injurious effect; and hence it was important to know the strength of the solution of chlorate of potash to be used. There was a simple substance which had not been mentioned as a deodoriser—charcoal. *Prima facie* charcoal must do good on the principle laid down by Dr. Routh. A simple combination of linseed-meal and charcoal was a homely but useful application.

Mr. Rice had long been in the habit of successfully using a solution of chlorinated soda in sloughing ulcers, and also as an injection.

Dr. Mackenzie had read the tracts of Bishop Berkeley, and it would from them seem as if nothing was so good for foul ulcers as tar water. He had used it variously diluted, and had found it useful as a remedy in foul ulcers. He had also used tar ointment with benefit. He referred to a case mentioned in the *Medical Commentaries*, in which a cancer was said to have been successfully treated by the local and constitutional use of tar; and to a case of obstinate phagedænic ulcer mentioned by Dr. Graves, in which creosote was successfully applied. Dr. Livingstone had also described the case of a sailor affected with cancer, which resisted all remedies, but which yielded to the use of lemon-juice administered to the patient during an outbreak of scurvy.—*British Medical Journal.*

One more number besides the present will wind up the first years' existence of the "News." We leave our patrons to decide in what degree it has benefitted them, and should they conclude that they have been benefitted at all, in this, the *first* volume of our journal, which has been attended with obstacles now completely overcome, we promise them, in the future numbers of our journal, the choicest reading matter, together with the latest *Medical News.*

New York, November 21, 1859.

Messrs. Editors:

Perhaps the record of a few medical items, as they transpire in this metropolis, may be interesting; therefore I will, without further introduction, note some of them.

During the past six months there has been a financial crisis among our doctors. Our city has been remarkably exempt from disease, not even the usual sickness among children has appeared to replenish their exhausted coffers. Many are now feeling the effects of this state of things, and quite a number of those who were able a few months since to ride in highly caparisoned vehicles, are now to be seen making their rounds on foot, having been obliged to sell out and reduce expenses.

To keep a respectable "turn out" in this city is no trifling matter, for to support it, a man must have what is styled in common language a "good business." To be sure, some of our distinguished and fashionable men drive two fine horses, not, however, because their fat calls are so numerous as to demand this double power, but because a line of demarcation is necessary to separate them from the plebian class of their fellows who have fewer patients and consequently less income.

Notwithstanding the learned and mighty dogmas yearly issued by our Academy of Medicine, it cannot be denied that the profession as a class in this city is rapidly degenerating. Instead of harmony, good will, and brotherly love among them, there reign, with but few exceptions, malice, hatred, and jealousy, which are the products of cliques and factions. The quintessence of charlantism holds its sway here, and from here radiates to every point of the compass, without an effort being made to extinguish it.

The cry of reform has of late been raised in England, and already our medical brethren on the other side of the Atlantic are beginning to reap its rewards. What a pity it is that the echoes of their voices cannot reach and arouse the profession of America in the same glorious cause.

The three medical colleges located in New York city are now in full blast, and if we could give credence to the reports of friends of each school, they have larger classes of students than ever attended during any previous session. But alas! this is

the same story we hear from year to year. There have been but few changes in the faculties of these schools since last winter. The College of Physicians and Surgeons have added some adjunct professors to its list, which means that they have thus nabbed some rising local talent, and secured it for the future use of their institution. It is a query to me, and perchance it may be also to you, why so many young men leave their western and southern homes to come to New York and Philadelphia to attend lectures, when they have good Universities near at hand. With the allurements and gaiety of city life, they cannot, in the majority of cases, steadily apply themselves to their books. In olden times medical students were obliged to go to Europe to acquire a scientific education, but that day has passed, and now the fashion is to go where excitement can be had. It would be at least in better taste for first course students to stay at home and learn the rudiments of their education, and then, in after years, should they desire to expand their experience, they could, with advantage, visit the large hospitals and charities of those cities which suffer the evils of emigration. A life of nearly two years as a medical student in Paris convinced me that two-thirds of the American students who visit Europe, go for the sole purpose of pleasure, yet do not let me be misunderstood as detracting from the merits of those gentlemen, for they very naturally in their travels pick up useful information other than that which strictly belongs to their profession.

The great attraction of New York to the purely scientific medical man is its hospitals. For variety and interest Bellevue undoubtedly at the present time stands at the head. The "Dead House" of this institution is a perfect mine of information on all classes of disease, and were weekly bulletins published, giving descriptive accounts of each post mortem examination made there, they would be read with interest far and near. In the line of surgery the old New York Hospital still retains the pre-eminence, and will, undoubtedly, for some time to come. The present cite of this institution has, of late years, become so valuable that its Board of Governors may be induced to dispose of their property on Broadway and move elsewhere; but as the hospital is needed in its present situation, it is to be hoped that they may not do so. St. Luke's

Hospital, which is, you know, the great Episcopalian Charity of this city, has been open several months for the reception of patients, and bids fair to be well patronized by this community. The working of our Dispensaries has reached such a state of perfection that they are an immense benefit to the public, besides being very desirable schools for the younger professional men.

On the 15th ult. the society for the relief of the widows and orphans of medical men gave their anniversary dinner at the Metropolitan Hotel. Last year, if you remember, this society entertained their friends and patrons at the Astor House, when the Hon. James Guthrie favored the members with his presence, and addressed them in his usual eloquent style. The gentlemanly hosts of the Metropolitan, on this occasion, fully satisfied the fastidious tastes of all present, and with delightful music, interlarded with several capital speeches, the evening passed off agreeably.

Did it ever strike you, Messrs. Editors, what excellent epicures medical men are? For my part, I know no other set of men by whom the *good things* of this life are relished as by them.

Pardon me for straying so far in my off-hand letter from what I first intended (i. e., news), but if you will receive the material which I have here substituted, I will endeavor, in my next, to collect something more entertaining.

Yours, etc., R.

Messrs. Editors:

In the Semi-Monthly Medical News for September, 1859, there appeared a notice of the "Transactions of the Indiana State Medical Society at its tenth annual session," which is mainly devoted to Dr. Fishback's report on medical education. The writer makes sundry quotations from the report, and also from a letter addressed by me to Dr. Fishback, which places both Dr. Fishback and myself in a false light before the profession. It is not a difficult matter in writing reviews to take a line here, a sentence there, and a paragraph elsewhere from the article reviewed, and so arrange them as to convey opinions and feelings utterly at variance with those intended

by the author. I desire, in a brief article, to correct the false impressions your article is calculated to produce.

Your reviewer quotes from my letter: "Our medical schools, looking only to pecuniary considerations, have become the nurseries of quackery," but fails to give the next succeeding sentence, viz.: "I know that *many able men* are educated in them, but by far the greater number are unfit to practice the profession." No one can fail to perceive that the two sentences, taken in their legitimate connection, convey a meaning widely different from the first taken alone.

Again he quotes from the same: "No school of medicine has a right to place upon an equal footing before the world, a ripe scholar, whose mind is well disciplined and stored with the richest gems of learning, and a dunce, who has dreamed away his life and wasted his energies and substance in riotous living, and yet not a year passes that this is not done by every school in the Union," but does not quote the sentence which immediately follows, viz.: "They grant diplomas alike to the qualified and the ignorant, and say to the world, 'These men are equal, they stand upon the same platform.' This is all wrong—it is unjust—and I cannot think of it without a burning sense of shame, *that so much effort is needed to effect reform.*"

The intelligent reader will plainly see from the above extracts that the ability of our schools to teach and give to the world accomplished practitioners is clearly acknowledged; the competency of the professors is no where questioned, but your notice conveyed the impression that we regarded medical schools as mere nurseries of quackery, without a redeeming element, a thought as foreign from our mind, and as offensive to our feelings, as it could be to the reviewer himself.

But take the report as it is and my letter, with all its apparent harshness, and will the editors of the Medical News contend that a single principle, proposition, or statement is at variance with truth? We have stated that we cannot hope for the elevation of the standard of medical education, so long as the ignorant, the illiterate, the uneducated can, with the expenditure of a few hundred dollars, receive diplomas from our medical schools. Will your reviewer deny the truth of this proposition?

It is affirmed that with each passing year, every medical

school in our country sends forth to the world the earnest cultivated medical scholar, and the ignorant, illiterate graduate, and so far as their power and influence go, place them on the same footing, with the same recommendations. Will your reviewer condemn this as untrue? (We are aware that all students cannot be equally educated—all are not equally gifted—but there may be a standard of preliminary qualifications, below which none should be allowed to enter our medical schools.) It is affirmed that the present system of teaching in our medical schools, requiring the daily attendance of students on some six or eight lectures on different and difficult subjects, is at variance with every principle of physical and mental education—that it is impossible for the uneducated mind, the undisciplined intellect, for those who have not been trained to long, severe, laborious habits of thought, to analyse, digest, arrange, and systematise, in so short a time, the facts and arguments contained in so many lectures; and when it is remembered that these daily lectures are interspersed with quizzing clubs, clinics, anatomical demonstrations, physiological and microscopical investigations, occupying the student's time from ten to seventeen hours per day, the absurdity of the system is clear as the sun in the heavens. It is also affirmed that the best interests of the profession, and of suffering humanity, demand that a thorough, speedy, and radical change should be had in our medical teachings, especially in our medical schools. Will your reviewer take opposite grounds? We submit to his honest and candid judgment.

For years past the subject of reform in medical education has been agitated, report after report has been made to County, State, and National Societies—learned essays have been written, eloquent addresses have been delivered, committees from the various schools have been appointed and reported many and earnest resolves in favor of reform, and what, we may ask, has been accomplished? Look, gentlemen, at your own school, and say what reform has been engrafted on your mode of teaching since its establishment, twenty years ago? And save in the thoroughness and ability of your teacher in chemistry, is there a single reform or improvement? Are there not as many—nay, more—professors, without an additional day to the length of term? Are there not as many

daily lectures, clinics, etc., and as many and as difficult subjects? and not one single higher qualification in preliminary education, not one higher pre-requisite for entering on the study of our noble profession. The requisites for graduation in 1859–60 are identical with those of 1837–8. The problem, then, assumes an arithmetical character, the solution of which we leave to your reviewer.

If in twenty years, which have been pre-eminently marked by progress in all the arts and sciences, not a single step towards reform has been taken by our medical schools, how many years will be required to effect a thorough and radical change?

But the secret spring which nerved your reviewer in penning his article is manifested in the remark, "We will seek to effect reform in our own way, as earnestly and as faithfully as the committee could wish," which says in the plainest language to the laity of the profession, we want none of your advice, none of your reports, none of your assistance—"we will seek reform in our own way;" cool, deliberate—very cool, very deliberate! We had fondly hoped that schools of medicine, and the profession at large, were one common brotherhood, united, and co-operating for the accomplishment of the same grand and glorious purposes, but if the schools have resolved to stand alone, self-existent, self-perpetuating, gathering about them pontifical robes, and assuming supreme dictation, let it be fairly understood, let the laity of the profession know their rights, and knowing, we venture, they will dare maintain them. If we may not lisp a syllable on the great subject of educational reform; if we may not suggest, even "in *our* own way," improvements which might be effected in our Alma Maters; if we are to rush hastily through them, quietly receive our diplomas, and then look back with reverential awe as if no error ever had or ever could have entered them, regard them as temples of pure, unmixed scientific truth, we should at once and forever abandon all hopes of reform. We must, however, in candor, remark, that we believe the reviewer has done injustice to his own good sense, not only in the last quoted remark, but in the whole of his article.

For some years past, this subject of reform in the teachings of our medical schools, has been discussed and reported upon

in our National Association. In the Transactions for the year 1847, the Committee on Medical Education, after speaking of the various reports that had been previously made, concludes the paragraph in the following pointed and forcible language:

"All (these reports) tend to one common point; the aim of all being, through the instrumentality of this Association, to arouse the profession of the country to such an effort as shall shake from itself the reproach of *ignorance* and of *quackery*, by which it has been *humbled* in its own estimation, and *abased* in that of its fellow-men."

Our optics are not keen enough to perceive that the above language is less harsh or less offensive than those taken from the Indiana Reports, which so excited the writer in the Medical News. The report bearing, as it does, the impress of truth, and the sanction of the American Medical Association, should be heeded by our medical schools, yet none, save the University of Michigan, have complied with the recommendation of that Association, while others deliberately say, "they will seek to effect reform in their own way."

The same report holds the following language: "The necessity of a thorough preparation for professional study is not an idea of recent origin. The father of medicine held, that to be an eminent physician, it was not only necessary to be well acquainted with the structure of the human frame, but also to be skilled in logic, astronomy, and other sciences; and of him it may be truly said, that he cultivated the art of medicine upon the strict principles of the inductive philosophy more than two thousand years before the world gave Lord Bacon the credit of introducing this method of philosophizing. His devoted admirer, Galen, was skilled in all the sciences of the day—in logic, mathematics, rhetoric, and philosophy."

If the professors in our schools and various teachers and practitioners throughout our country had such exalted ideas of the necessity of high preliminary qualifications for those entering on the study of medicine, and would then act upon them, how speedily would that "reproach of ignorance and quackery" be shaken from our skirts, then would our noble profession occupy a higher rank amid kindred sciences, and her glorious beauty would not be as a fading flower, but as a crown of glory, and a diadem of beauty.

Allow me to make one other quotation from the report of the Committee on Medical Literature to the American Association of 1847. After alluding to the necessity of adopting some rigid rule in regard to high preliminary education, the committee speaks as follows: "We therefore strongly urge upon the Association the adoption of some measures which will cause the State and local societies, throughout the whole country, to take such action as will deter their individual members from receiving young men as students of medicine who are not properly qualified to commence such study. The common and long continued custom of referring the whole subject of qualifications, both preliminary and medical, to the final examination of a college faculty, is not more injurious to the profession than unjust to the student himself. If the college faculties prove as indifferent in regard to the general education of the student as his private preceptors (and what right have the profession to expect they will not) the whole profession becomes filled with ignorance and corresponding degradation. On the other hand, if the faculties discharge their duties with moderate exactness, a large number of students must be annually rejected, after they have lost three years of most valuable time, with all the accompanying pecuniary expense; and that, too, after they have quietly held the intimate relation of pupils in the offices of respectable practitioners during their whole course of study."

The same spirit breathes through this report which has been manifested by all the reports to both State and National Societies—the same spirit which now dwells and moves in the mind of the best and most gifted professors of the healing art; but still, there comes up a voice from a western professor, "We will accomplish reform in our own given way." May we not ask in what that "way" consists? It may be far better than any hitherto suggested;—if so, we shall hail it with gladness, and bid it a hearty God-speed.

In conclusion, we would submit to the candor, not only of the editors of the News and the professors of the Louisville Medical School, if there are not a large number of those who have their signatures on their diplomas, whom you would be unwilling to entrust with a case in your own families requiring surgical skill, or with the management of a severe and

protracted illness. Surrounded, as you are, in cities with some of the most learned and gifted in the profession, with all the appliances which skill can invent or art devise, even there, you are particular whom you employ, and would hesitate long before engaging the services of some whom you send forth with eloquent predictions of usefulness, skill, and exalted fame. Remember that life and health are as dear in the country as in the cities, and upon them hang interests as vast and momentous.

When your reviewer says that we denounce the whole profession as a set of "jackasses and ninnies," he is unjust to us, and does violence to his own good sense. We only refer to the fact and condemn the principle of granting diplomas to men totally unfit to practice the profession. We know that there are hundreds and thousands of American graduates and practitioners whose intellects would adorn any sphere in life—whose acquirements would rival those of any other profession, and whose self-sacrificing spirit is unsurpassed by any other class of men We would not, by word, or deed, or intimation, mar the beauty of their character, nor would we (had we the power), suffer the illiterate, the uneducated, the undisciplined, the mere pretender, to wear the same honors, receive the same diplomas, and the same sanctions from our medical schools. The blunders, and errors, and ignorance of graduates injures the entire profession, and the schools in sending forth to the world men of this class, do more to cripple the profession, and bring it into disrepute, than all other causes besides.

T. W. FRY.

Crawfordsville, Ind., Nov. 21, 1859.

In our number of September 1st, we noticed the "Transactions of the Indiana State Medical Society at its tenth annual session," in a manner which seems to have excited the ire of some of our friends.

The communication of Dr. Fry, dated November 21st (see p. 727), must be received as a matured reply to the strictures which we felt constrained to make at that time, and we will therefore reply in a becoming spirit, and with proper deference to a judgment so deliberately formed. Dr. Fry very unneces-

sarily asserts that "it is not a difficult matter in writing reviews to take a line here, a sentence there, and a paragraph elsewhere from the article reviewed, and so arrange them as to convey opinions and feelings utterly at variance with those intended by the author," for his manner of quoting from our review rendered such language superfluous. Nor is he less disingenuous when he forces constructions unwarranted by the naked text, much less by the context. He harps upon the expression, "our own way," as if it had a thousand strings, and would have his readers believe that there was something dangerously jesuitical in the expression—something proceeding from medical school darklanternism—a banshee "voice from a western professor," hissing as it goes, "our own way."

If the reader would refer to the article complained of, he would find that after sketching in their own language the way which the Indiana Committee seemed determined to take, we concluded in these words:

"We deeply regret to be compelled to take such a view of the means employed to effect an end that we will seek to effect in our own way, as earnestly and faithfully as the committee could wish, but, feeling as we do, that such reports are calculated to do serious injury, and retard the progress of reform, we cannot remain silent even when, as in this instance, they proceed from friends and gentlemen for whom we entertain the highest respect."

Dr. Fry asks what that way is? He will find it very clearly indicated in Nos. 5 and 6 of our journal, which numbers we feel confident were never read by him, else he would not dream of suggesting that we were arrayed against the "laity." Our editorial on the subject in No. 5 concludes thus:

"The different medical schools might have cause for different methods of thinking and acting, but with the lay members of the profession there can be no personal interests to give them a bias. They feel concerned for the welfare of the profession alone, and to them we are willing to trust the decision of all perplexing questions in regard to the best means of effecting reform. We trust they will turn out in their full strength, so that their influence may be paramount: in which event, we have full hopes that much good may be effected."

And again, the concluding paragraph in that of No. 6,

"None would rejoice more heartily than ourselves to see, and none will more cheerfully co-operate to produce concert and efficiency in the Convention; but if the effect at reformation fail there, it surely need not in the private offices of practitioners," ought to be sufficient to tranquilize even the mind of Dr. Fry regarding our position.

Thus much as to his quotation from us and his forced inferences from it; and now as to those we made from the report, or his letter, which was made part of that report. We certainly did not design to place either Dr. Fry or Dr. Fishback in a "false light before the profession." Neither of those gentlemen would accuse us of such a design; and if the sentences which Dr. F. now adds to make the meaning complete, alter, in any manner, the sense of the isolated quotations which we made, or are in any degree palliatives, or necessary expletives of it, then we must confess to a dullness of perception which we may regret, but cannot hope to correct. Why we are taken to task by Dr. Fry upon the subject of medical reform, we cannot divine, unless it be that he is troubled with that "*cacoethes scribendi*" which has ruined many, and which a wise man once wished his enemy had possessed, for certainly not one sentence or word which we ever wrote or uttered, would justify the inference that we were opposed to medical reform. In 1848 we publicly stated that we thought "the doors of medical schools were too wide and their hinges too loose," and we have not had cause to change that opinion. On the contrary, every day confirms its correctness, and we are prepared with some facts, and in next March will be prepared with additional ones, which may be used publicly hereafter, although they should involve the professional reputation and honor of some high in actual position heretofore, and in nominal position now.

The number of white individuals who can be brought together, and consent to be called students, is a subject of debate, and anxiety, and industry with many men, called gentlemen, for seven months in the year; and it matters not who they are, or whence they come, or whither they go, so long as they will make their presence known at some given point, for understood purposes; and this game of catch is played by men whose names may some day come to light, however covert they may imagine their practices to be. But this is not true of all.

There are multitudes of honorable exceptions, and one great objection to the report of the Indiana Committee was that its anathemas were hurled too indiscriminately. When Dr. Fry requests us to look at "our own school" and answer several questions which he propounds, he seems to forget that there is such a feeling as delicacy which one ought not to compromise even in controversy.

Perhaps the policy which has heretofore governed the University has left no room for improvement, so far as the occupancy of the chairs was concerned, and perhaps the same policy in this respect still governs her. We would be covered with blushes to say that it does; we would be covered with shame to confess that it does not—and so we trust our interrogator will excuse our evasions of questions so personal in their character.

But aside from the "thoroughness or ability" of any of her teachers, the University has made within one year very great improvements, and she stands out to-day in bold relief as one of the most, if not the most, practical and demonstrative of schools in the country. She is also as anxious to see medical reformation as the Indiana State Committee, and instructed her representatives last year to seek to effect it. She has never, so far as we know, and certainly has not since our association with her, ever departed from the strict letter of the laws which are her published guides, and no gentleman of our colleagues, either directly or indirectly, by word or act, has ever intimated a willingness to render them more lax, but, on the contrary, all of us would be glad to practice under new laws and greater stringency in conjunction with the other leading schools of the country, and let the little private sub-schools do as they please.

The proposition which Dr. Fry submits to us in reference to whom we would employ in our family is very pointed, and we will give it a pointed solution. We will assume what he means to convey (for from the construction of his sentences, we are often compelled to rest upon assumption), and state, that in all probability if a case of illness should occur in our family, we would employ whom we pleased. If his services were not to be procured, and we were asked to choose between a graduate of the University of Louisville and one of any other school in the Union, we would not hesitate to select the graduate of

Louisville;—and as to such of them as have our names to their diploma, we would give them the preference over those who had not.

As to our injustice to Dr. Fry, and "violence to our own good sense," in saying that we (you) denounce the whole profession as a set of "jackasses and ninnies," we submit that if an error has been committed, that error has been magnified by the interpolation of the word "whole" in this connection. The original charge is admitted in the apology which forms the concluding sentence in the last named complaint, and the slander is perpetuated in that apology, but we will quote the entire sentence: "When your reviewer says that we denounce the whole profession as a set of 'jackasses and ninnies,' he is unjust to us, and does violence to his own good sense; we only refer to the fact and condemn the principle of granting diplomas to men totally unfit to practice the profession."

We dismiss this subject by the simple observation, that he is not generally the best bred man who first complains of the vulgarity of others, neither is he always the best educated man who first complains of the ignorance of others.

Pharmaceutical Department.

By T. E. JENKINS, Pharmaceutist.

Palatable Medicines.—The physician who has the welfare and comfort of his patients at heart, does not consider his whole duty performed when he has finished his prescription for a nauseous dose; he studies at the same time how this medicine may be most agreeably administered to his sick patient; his object is not to add to the sufferings of the ailing one the disgust which so often accompanies the taking of his bitter pills or potions; he tries to disguise the bad flavor of his drugs under the garb of some more agreeable, harmless, or innocent placebo; he knows that frequently the mental anxiety excited in a delicate or nervous patient by the anticipation of a sickening dose, has a great deal to do in protracting a cure,

and every one is aware of the trouble and vexation attending the administration of bad tasted medicines to children.

Pills may be rendered tasteless, either by coating them with sugar, with gum, or with balsam tolu. Either of these substances may be used for disguising the odor and taste, while they do not interfere in the least with the medicinal action of the ingredients of the pill.

The operation of sugar coating pills is very simple, and may be practiced by any one. It is done thus:

After the pills are finished, they should be rolled between the fingers, previously moistened with thick mucilage of gum arabic, and while still wet, thrown together in a capsule or saucer containing a sufficiency of very finely powdered sugar, and rotated therewith until the surface is completely covered, after which they may be exposed to a gentle heat to dry them. If necessary, this process may be repeated in order to give a thicker coating.

Pills containing ingredients insoluble in ether, may be coated with balsam of tolu by rapidly rotating them with a saturated ethereal tincture of tolu in a shallow dish until they begin to adhere together, when they should be removed and laid separate on an amalgamated tin plate, and exposed to a gentle heat to dry.

This thin varnish of tolu will be readily dissolved by the alkaline liquids of the intestinal canal.

Powders may be mixed with aromatised sugar, in order to disguise their nauseous qualities, and every practitioner should be provided with a few bottles of sugar aromatised with orange, lemon, peppermint, or other agreeable volatile oil, so as to have always at hand the means of rendering less disagreeable the chartulæ for his little patients.

Medicines may often be administered in the form of a sugar lozenge, and thus the sapid ingredients will be entirely masked. We think this manner of preparing medicines for administration, especially to children, is too much neglected; and it is generally known that the little ones will eat with avidity a medicated lozenge when they could not be induced to take the medicine in any other form.

A very elegant bon-bon may be made by incorporating powdered drugs or even medicinal extracts with pulverized

aromatised sugar and white of egg, in the manner in which confectioners make their "iceing" for cakes, and dropping on a tile from the truncated end of a paper cone, portions of the mixture suitable for a dose, they soon dry when exposed to the air, and will be eagerly sought after by children.

In prescribing mixtures oftentimes a bitter salt or alkaloid might be dissolved in sirup of ginger, or of tolu, or of lemons, instead of simple water, as is most commonly done.

Quinine is more soluble in glycerine than in water, and may be administered in that vehicle without the addition of an acid.

Many very bad tasted salines may be rendered palatable, or, at least, not so disagreeable as usual by dissolution in water charged with four or five times its volume of carbonic acid gas. Sea water itself is said to be rendered quite an agreeable purgative draught by being so administered.

For Chaps.—Cold cream, mixed with half its weight of glycerine and one-fiftieth of finely powdered camphor, is an admirable remedy for these unwelcome chaps.

Antiseptic and Deodorant for fœtid ulcers, etc.:

℞ Plaster of Paris,	-	100 parts.
Coal Gas Tar,	- -	1 to 3 "

Mix. To be applied to the part.

Editorial Department.

CERTIFICATE MEN.

An intelligent and reliable correspondent has sent us a paper containing the advertisement of a traveling aurist and dentist, with a testimonial appended, signed by Dr. Spilman and others. We have no doubt that our old friend, Dr. S., has become in this instance the victim of some ingenious form of imposition. Probably his generous impulses have led him astray. At all events, the character of the information we have received, and the source from whence we obtained it, lead us to suppose that

he has been grossly deceived, and thus has permitted the influence of his good name to be prostituted to a purpose he would be among the last of men to approve. Under favor of this particular instance of it, we would take occasion to call the attention of the profession to "certificate mongering" in general, which, in various forms—some of them very covert and unsuspected—is doing a great deal among us to sustain pretensions which would otherwise obtain no countenance.

Joseph C. Neal once remarked that there were but two kinds of people in the world—one was a "mouse-kind, and the other a "cat-kind," and that the latter fed upon the former.

There are no more decided manifestations of a disposition to prey upon their fellows, than are exhibited in the characters of those who have reduced the business of obtaining signatures, or plying the arts of the parasite, to a science. In the commercial world, a man with some credit, some capital, and an unusual amount of kindness and pliability of feeling, will be found out by men who are not so fortunate in their financial status, but who are worthy specimens of the genus "felis," sometimes combining the stealthiness and rapacity of the cat with canine servility, and before the unfortunate individual of the mouse species is fairly aware of the fact, he is converted into a "Certificate man," and sooner or later is called upon to take up the protested bills of his proteges. Just so in our profession: men with but little professional or moral merit, foist themselves upon those who are more fortunate in possessing a share of both, and adroitly procure their indorsement, either verbal or written, and the innocent doctor of the "mus" species is ultimately astounded when he is called out of his quiet hole in the corner to give an injured profession his reasons for having patronized a quack, and given countenance to unprofessional and disgusting trickery. The one of these two characters deserves our pity, mixed, it may be, with a spice of contempt for his weakness;—the other, our execration for having taken advantage of native kindness for the furtherance of his own selfish and impudent purposes. "Certificate men" abound in our land generally, indeed, prompted by the better impulses of humanity, but not unfrequently actuated by less worthy motives such as a particular private gain, or the gratification of a corroding pique, all equally mischievous in results, though far

from being equally culpable. We know them of all these various classes, and we know also some that they indorse, and can testify that few exhibitions of selfishness and fawning hypocrisy are more revolting to our taste and moral judgment than that presented by those men, who, to bolster up their equivocal professional reputations, play satellites to some one whom they acknowledge as their superior, until they win his permission to use and abuse his respectable name to sustain their own unfounded pretensions, and broken-winded characters. We do not aspire to the position of detectives in medical ethical police, but would be gratified with some excuse sufficient to relieve us of the charge of procuring indecent exhibitions, when we lift the curtain and show these cunning artists, both high and low, in the very act of working their wires, and accompany the spectacle with a brief history of their machinations, certificate vending, and utter disregard of professional honor for the past year.

NOTICES OF NEW BOOKS.

We are indebted to the publishers, Messrs. Lippincott & Co., of Philadelphia, for a copy of Gerhard on Diseases of the Chest. Fourth edition. 1860. This is an octavo volume of near 450 pages, printed and illustrated in the highest style of art. We recommend it to our readers as one of the latest and very best authorities upon the very important class of diseases of which the author treats.

Our thanks are likewise due to Messrs. Morton & Griswold, of this city, for a copy of Parrish's Practical Pharmacy. This work is designed as a guide to the dispensing druggist and practical pharmaceutist, while to the physician who compounds his own medicines, it will be found a valuable assistant in enabling him to arrive at the important desiderata of preparing his remedies so that they will be most efficient, most palatable, and best preserved.

Dr. R. Griscom, of New York, will also accept our acknowledgments for a copy of the report of the Third National Quarantine and Sanitary Convention. This report contains many valuable papers, of which we promise extended notices when more time and space are at our command.

Such as have not known the cares and anxieties of editorial life, and who desire to spend their nights in rest and their days in peace, will do well to remain covered by the veil of ignorance, for the delights of knowledge are dependent upon the kind of knowledge you attain and the price at which it is purchased. One year ago we determined to strike out upon the sea of medical politics, with no other chart than a conscience void of offense, and a sense of professional honor and dignity which we determined to uphold at any and every hazard. How faithfully we have adhered to that determination others must decide. How faithfully we have performed the promises made in our salutatory others must determine. We have not to reproach ourselves with wrongs intentionally committed, or justice withheld, but we must confess that some professional derelictions and conduct in high places have not been criticised as perhaps they should have been. Our silence in this respect has been misconstrued, and cotemporaneous journalists have wielded weapons which we would have used, but from a morbid delicacy which no longer controls us;—thanks to many flagrant violations of ethical propriety for its removal. When our batteries do open they will not open upon a pigmy tribe, skirting the margin of a circle, whose center lights up with smiling benignity when the fawning voice of adulation or the cringing praise of toadyism plays court to vanity. We will fire upon the center itself, and lift the curtain from corruption. Breaches of propriety which have only local effect must, of course, pass by; but there may be others more diffusive, in which, perhaps, the whole profession will be interested.

To those gentlemen who have encouraged and sustained us by counsel and subscription, we tender our sincere appreciation of their kindness and good will. Some have thought that we were more plain than pleasant in our language. This we expected; but when we offered our columns for reply, they had no right to complain because we did not think proper to enter into a private correspondence upon printed and public topics, emanating from public men. Anonymous communications we have not inserted—none but moral cowards write them. Of course, we allude to such as are to us anonymous. Parties, therefore, who have written them will find their answer now, if their own conscience have not forestalled us and rendered the reply unnecessary.

Our editorial department has not been as full as we intended it to be, but absence and illness deranged our plans.

Semi-Monthly Medical News.

VO. I. LOUISVILLE, KY., DECEMBER 15, 1859. NO. 24.

RUPTURE OF VAGINA—ABDOMINAL SECTION—DEATH OF PATIENT.

BY SENIOR EDITOR.

I was called at 9 o'clock, p. m., on the 7th April, to see a colored servant girl, aged 28, in labor. She had reached the full period of pregnancy, and had experienced uterine pains for three hours. She was of average stature, much inclined to obesity, and in appearance very robust.

The following history of the patient was obtained:

She had, previous to marriage, suffered from dysmenorrhœa, but since that time had enjoyed excellent health. Her first child was still-born at full term. She had borne one living child from her second gestation—had miscarried about the second month of the third pregnancy; had then given birth to two full term fœtuses at successive periods, both of which were in a state of incipient putrefaction. Her labors had always been protracted and painful, but her recoveries had been ordinarily good.

She had now arrived, as stated, at the full period of her sixth pregnancy. Her health during gestation had been unusually good. She had complained of nothing, except an occasional pain in her side, and once or twice of hysterical choking. Her bowels had been twice evacuated during the afternoon, and free discharge of urine occurred shortly after I entered the room.

Upon examination I found the mouth of the uterus dilated over two inches in diameter, the lips of the os not rigid, and the vagina moist and apparently healthy. The pelvic canal was ample, and without impediment of any description to the progress of labor.

Among the first observations which occurred to me after examining the patient, was her enormous abdominal enlargement. In answer to inquiries in regard to this point, the attendants informed me that she at all times appeared to have such unusual abdominal development, as to be the subject of remark even when not pregnant.

After watching the patient for an hour, during which the progress of the labor was unsatisfactory, the uterine contractions seeming short and very abrupt in their advent and cessation, it seemed probable to my mind that the parturient efforts were embarrassed by great distention of the uterus, and as the os-uteri was now well dilated, I ruptured the membranes. An enormous quantity of liquor amnii escaped both at the moment of rupture, and during contractions for the succeeding hour or longer. The vertex now presented at the superior strait with the face to the sacrum. No change in the character of the uterine action followed the evacuation of the liquor amnii. The contractions were short, spasmodic, and violent, and the downward propulsion of the fœtus did not seem at all proportionate to the contractile energy of the uterus. The patient was herself aware that the progress of her labor bore no just relation to the violence of the parturient efforts, and was perpetually seeking her remedy in change of posture. The positions she usually sought were either standing with her hands resting upon her hips or upon her knees, with her elbows resting upon a chair, or sitting over a large night vessel. I have generally had respect, so far as it was admissible, to the instincts of the parturient female in reference to the choice of position best calculated to facilitate her labor, but in this case the spasmodic character of the contractions led me to apprehend a catastrophe of the nature of that which afterwards occurred, and from a period shortly after my entrance erect positions were discouraged and ultimately absolutely prohibited.

The state of things above described persisted until about 1 a. m. The head continued engaged at the superior strait, although no obstacle to its advancement was apparent. A fold of the anterior lip of the uterus had been pushed down so as to intervene between the head and pubic arch, but such was the amplitude of the pelvis that this could not, in my estimation, constitute any considerable, if any, impediment.

Probably about half past one she was permitted to sit over a bed-pan to evacuate the bladder. I refused her request to be permitted to get out of bed for this purpose, and the bed-pan was placed upon the bed, and she was lifted upon it without exertion upon her part. Shortly after this, upon withdrawing my hand from vaginal touch, I found considerable blood stain. This sanguineous discharge continued, though to a very trifling amount, throughout the sequel of the case.

This hemorrhage, however slight, exciting some additional fears, and the characteristics of labor remaining unaltered, I resolved to place the patient under chloroform, with the hope that some favorable modification of uterine action would ensue. Having left the bed-side and cleansed my hands, I was in the act of writing a prescription, when the patient shrieked out, "Oh, my side," in a tone so expressive of pain as to lead me to apprehend the occurrence of some serious accident. Upon examination, the head had receded beyond the reach of touch, and the fœtus could be distinctly felt through the abdominal parietes. At the moment of occurrence of accident, the patient was upon her left side. One uterine contraction speedily followed this event, after which the uterus was quiescent. As soon as their presence could be procured, I was joined by Drs. Wible and Flint, both of whom readily recognised the fact of escape of the fœtus into the abdominal cavity, and concurred with myself in the opinion that abdominal section offered the best hopes of recovery to the patient.

It being determined to remove the fœtus through a section of the abdominal parietes, the temperature of the room was properly adjusted, the patient rendered insensible by chloroform, and an incision of the integuments made in the linea alba, from two inches above the umbilicus to about the same distance from the pubis.* The upper extremity of the incision was then carefully carried through the parietes into the cavity, and, the finger being introduced, a probe-pointed bistoury, guided thereby, was made to divide the fascia and peritoneum to an extent corresponding with the section of the integuments. The upper portion of the section fell directly upon the fœtal cervix, its nates resting in the left hypochondrium, and its feet in the iliac fossa of the same side. The head was seized, and the whole fœtus easily withdrawn through the wound. While

* Dr. Flint conducted the operative procedure.

it was held up by an assistant, the hand of the operator, guided by the funis, was carried between the folds of the intestines to the region of the left kidney, where it found the placenta, and withdrew it without difficulty. A large quantity of sanguineous fluid made its escape from the abdomen, when the section was made; but no recent hemorrhage was observed during the operation. After carefully sponging away the fluid still remaining in the cavity, the wound was united by the interrupted suture and adhesive plaster, supported by a heavy compress and bandage.

No embarrassment was experienced at any stage of the proceedings by protrusion of the intestines. The patient was made dry and comfortable, and a full dose of laudanum administered, instructions being given to have the opiate repeated every fourth hour, so as to keep her composed.

The operation was completed at about half past six, or four hours after the occurrence of the accident. Scarcely any blood was lost from the incision, and the patient seemed, on emerging from her state of anæsthesia, in as favorable condition as we could have asked. At noon, pulse 130; complains of no pain; is hopeful and has asked for tea; laudanum continued; evening and night visits, no change worthy of note; has passed urine repeatedly and without difficulty.

19th. Has passed a comfortable night; sleeps quietly, but presents no evidence of undue narcotism, although tinct. opium has been continued in teaspoonful doses every fourth hour; pulse somewhat irregular in point of force, and increased in frequency; her face was bathed in perspiration. She was, however, still hopeful, and asked permission to be lifted to a chair. Ordered the opium to be continued, and with each dose a dessert-spoonful of brandy, with beef tea for nourishment.

Noon. Pulse increased in frequency; somewhat irregular; face bathed in perspiration; continue same course, except increased quantity of brandy.

During the night of the 19th and the morning of the 20th, a more favorable condition seemed to exist, but towards noon her extremities became cold, sinking rapidly ensued, and death at half past one. Her countenance was anxious for twenty-four hours previous to death, and picking at the bed-clothes was observed for four hours preceding death.

Being necessarily obliged to be absent, Drs. Cook and Miller

kindly complied with my request to conduct an autopsy, the appended account of which the former gentleman has furnished me.

I am satisfied that the lesion in the vaginal wall had been partially, if not wholly, produced some little time before the escape of the fœtus into the abdominal cavity. It probably occurred at the time she was over the bed-pan, for upon examination after this was the first appearance of sanguineous discharge, which, I have but little doubt, proceeded from this lesion. After the rent had been effected, the pendulous abdomen and wide pelvis allowed such perversion of uterine axis, particularly when lying upon her side, that the fœtal head was forced into the rent, and, passing through, was directed upwards to the position it was found to occupy at the time of operation.

Post Mortem Nineteen Hours after Death.—The abdomen was unusually large, pendulous, and tympanitic. The sutures were removed from the incisions through the linea alba—no adhesions had taken place between the approximated edges of the abdominal walls. The contents of the abdomen were next exposed by carrying the incision upwards to the ensiform cartilage, and downwards to the symphysis pubis, at the same time dividing the recti-muscles at their respective points of origin from the os pubis. The stomach and intestines were distended, and very tense from the evolution of gas, to which escape was given by penetrating the intestinal walls at several points with the scalpel. The odor emitted was exceedingly offensive. The partial collapse of the intestines revealed the general appearance and position of the abdomino-pelvic viscera. Some sanguineous clots were found in the left lumbar region and left iliac fossa. The intestinal walls were in a state of passive congestion, which, from all appearances, was post mortem; the peritoneum, especially in the lower segment of the abdomen, was discolored with the blood effused into the cavity, but no traces of inflammation could be detected at any point. The bladder occupied its natural position, and presented the usual triangular form of the empty viscus in situ. The uterus was about the average size of the post partum organ; the body occupied the hypogastric and lower border of the umbilical region. The

cervix projected into the pelvic cavity. The walls of the entire uterus were without any lesion. The hand, which was now directed into the recto vaginal cul de sac, readily passed into the vagina, indicating, unmistakably, the passage through which the fœtus escaped into the peritoneal cavity. Before prosecuting any further dissection, a careful tactile examination was made to determine if any lesion or laceration of the rectum existed, but none was found. The uterus and vagina were detached and removed, en masse, by dividing the cellular tissue which connects the lower two-thirds of the posterior surface of the vagina with the anterior surface of the rectum. Dissecting up the base of the bladder, the urethra, which is embedded in the anterior vaginal wall, and cutting through the vagina near the external orifice, a longitudinal laceration was found in the mesial line of the posterior vaginal wall three inches and three quarters of an inch in length, commencing about half of an inch from its attachment to the cervix uteri, thus embracing fully two-thirds of the length of the canal. The edges of the lesion were as even and direct as if made with a scalpel; the edges appeared thin, but not more so than might be expected from the distension produced by the passage of a full grown fœtus; there was no evidence of any previous disease of the vaginal walls. It would appear from the post mortem revelations that the head of the fœtus had, by an active and powerful uterine contraction, been suddenly forced against the posterior vaginal wall with a momentum sufficient to rupture the thin wall, sever the loose cellular fibres which connect it to the rectum, and burst through the recto vaginal fold of peritoneum into the abdominal cavity.

The general anatomical features of the patient suggest to the writer of this post mortem sketch, a sufficient explanation of the mechanism of this anomalous case.

The patient was a stout, robust woman; the abdomen was large and pendulous, which would allow of sufficient anterior gravitation of the uterus to make the axis, if extended, correspond to about the junction of the upper and middle thirds of the vagina; the uterine walls were thick and capable of powerful contraction; the pelvis was capacious. Under these circumstances, when the head entered the superior strait, there would not be the usual rotary movement. An unusually active

and sudden contraction of the uterus would force the fœtal head into the pelvic cavity, increase the flexion, and the power (the contracting uterus), applied in the direction of the abnormal axis—in this case backwards and rather upwards—would guide the vertex, unusually flexed, in the direction of least resistance, which would be backwards and upwards, into the abdominal cavity.

ABDOMINAL TUMORS MISTAKEN FOR OVARIAN.

BY W. L. SUTTON, M.D., GEORGETOWN, KY.

Having seen a report of some remarks in reference to tumors in the abdomen, made in the College of Physicians of Louisville, I have thought proper to transmit the following account of a case which I occasionally saw, as appears by the report, which details all of my professional connection with the case.

Before I ever saw her she had consulted the best surgeon in the West, and had been so unfavorably impressed by his diagnosis and prognosis, that she made up her mind to enjoy what little time she had to live as best she might.

This case may serve to impress upon our minds two important things—

1. The great care required in forming a diagnosis as to abdominal tumors, and the uncertainty of correctness, even after great care.

2. The amount of injury which will sometimes be borne for many years.

It is probable that some confusion as to dates has occurred in the minds of her friends, from whom the earlier history of the case was obtained; or if these tumors really had any connection with her *taking cold*, it is difficult to conceive how they could have become distinct in the situation mentioned in the short space of time which the history seems to indicate.

The subject of the following remarks was an interesting lady of 35 years, the mother of six children, of whom the youngest is now three years old. When about thirteen or fourteen years old, she caught cold and suffered severely, and then became sensible of a tumor in each side in the vicinity of the division

between the lumbar and iliac regions. These tumors increasing in size, she, after marriage, consulted several physicians, who presumed they were of ovarian origin. They seemed, however, to offer no impediment to impregnation. Some five years ago, she had an idea that her right leg was shorter than the left, and walked lame. Upon stepping down from a slight elevation on the 25th of November, 1856, she fractured the right femur, two or three inches above the condyles. She suffered very great pain for a considerable time after this fracture; but it healed in about the usual time. Some three months after the time of this fracture, whilst still wearing crutches, she fell upon the right hip and received a severe injury. I was called to her and judged that the femur was fractured at the neck. This was on the 28th of January, 1857. Again in the usual time she was able to get about on crutches, with the limb shortened some three-fourths of an inch—but as she thought, as long as it was before the first fracture.

During all this time she was rather fleshy than otherwise, with a complexion rather pale, but not markedly so. I had attended her in three or four of her accouchments, in one of which she lost more blood than was desirable, and I deemed it proper to administer iron to invigorate her system.

During my attendance after the second fracture, I again used the iron with the same good effects as before. After this her health was tolerable until May, 1858, when she again lost her balance, and fell and hurt herself badly, and she suffered as much pain as at either fracture. From this time she suffered very much at times, and on the 1st of January, 1859, she had a slight hemorrhage from the lungs, which continued to recur occasionally until the 23d of February, when she expired.

I was requested to be present at the autopsy. She was very much emaciated; color rather sallow or waxy; some veins ramifying over the abdomen, which was rather less prominent than I had expected; the right limb some three or four inches shorter than the left; foot everted; took hold of it and found a fracture three or four inches above the condyles. Upon cutting down to the femur we found it very much cancellated. It was the opinion of the friends that the femur had given way during the dressing after death. There was also a considera-

ble infiltration of the cellular substance, and just exterior to the bone an indurated membrane of considerable strength.

In the abdomen, as soon as opened, the liver enormously enlarged, extended to the pelvis. For some little distance below the edge of the cartilage it was of a proper color. The gall bladder was large and distended with healthy looking bile. But the lower portion of the liver was dark colored, thickened and having several spherical elevations of different sizes, one of which, in size of a section of one-third of an orange, was situated in the line below the right iliac region and the hypogastric, and was very evident before death. The left lobe seemed entirely healthy. On the left side nothing appeared to correspond with the prominence which had been observed during life. But upon lifting the bowels a fleshy tumor appeared of some five inches in diameter and ten long, running upwards and towards the left side. It was more or less intimately connected by adhesions to every thing with which it came in contact, the duodenum and ileum, the colon, mesentery and vena cava, these being separated in places by the knife, in places by tearing, the tumor was found to arise from, or be connected with, the left end of the pancreas. The stomach, spleen and bowels seemed healthy, save that the colon was empty and reduced in size to a mere strip, but distingushed by the longitudinal bands. The kidneys and ovaria were sound. The contents of the thorax were not examined because of want of time.

It is proper to remark that this lady had suffered for many years with severe pains which she referred to the thigh bone. And also that after her death the relative length of the lower limb was rather carelessly estimated, and being flexed, was probably longer than stated.

A CASE OF SCHIRRHUS PYLORUS.

BY W. L. SUTTON, M.D.

I can give but a very meager account of the patient from whom the stomach was taken. She was a negro woman of probably 55 years, and had been subject to frequent vomiting for many years. Sometimes she would throw up enormous quantities. Sometimes she would take moderate quantities of food for several days, and then vomit considerably. She would

go without an evacuation from the bowels an incredible period, then the discharge would be small and hard.

Autopsy.—Emaciation extreme. Upon opening the abdomen nothing was to be seen but an even, uniform surface, which filled every nook of the cavity, and upon examination it was found to be the stomach enormously enlarged and moderately distended. Upon dividing the œsophagus and duodenum, and lifting the stomach out, it resembled in form a pillow-case more than any thing to which I can compare it, having its form determined by the walls of the abdomen and pelvis. The pylorus was two inches in diameter, and of firm consistency, scarcely pervious.

The duodenum ran from the pylorus directly to the lower portion of the pelvis, and the intestines, small and great, were pressed together there in the smallest compass possible, being literally empy of fæces.

No note was made of any thing wrong in any other organ.

When I took the stomach from a solution for preservation, I was rather surprised to see that it had lost its square form and resumed one approaching what is natural.

REPORT OF A CASE OF CROUP, SUCCESSFULLY TREATED BY TRACHEOTOMY.

BY T. W. GIBSON, ESQ.

The patient, a boy of eleven years of age, had been subject to croup for several years. The writer of this, his father, was summoned home hastily on the first of November, 1857, and on arriving there at 2 o'clock, p. m., found the patient rapidly sinking. Face and extremities livid, pulse almost imperceptible, breathing labored and short to the last degree. The three attending physicians, Drs. Coombs, Way, and Taggart, of Charlestown, Ind., concurred in the opinion that death must ensue in a few hours, and that nothing was to be hoped from medicine. It was immediately determined to resort to tracheotomy, and the operation was performed by Dr. Coombs, assisted by the other physicians named. The day light was almost gone before the operation was completed, and we were compelled to the resort of reflecting the rays of the setting sun by a mirror upon the throat of the patient. No large vessel was cut, and the hemorrhage was very trifling. Nothing pecu-

liar in the method of operating occurred, except perhaps the expedient resorted to for the purpose of enlarging the opening in the trachea. With a pair of round lipped forceps a segment of the side of the opening was seized of the size designed to be removed, and while so held the segment was cut out by the bistoury, and the piece removed with the forceps. A similar operation on the other side left a symmetrical opening in the trachea, about three-eighths of an inch in length, and one-eighth of an inch in width at the center, each side being the segment of a circle. A violent fit of coughing succeeded the opening of the trachea, during which a piece of membrane three-fourths of an inch in length was presented at the opening and drawn out with the forceps, and great relief in the breathing immediately succeeded, and the urgent symptoms of asphyxia rapidly disappeared.

The patient seemed to suffer great thirst, and every attempt to drink brought on a fit of coughing, during which several other pieces of membrane were drawn out of the aperture in the trachea.

The breathing was carried on through both the mouth and the opening. Arterial action through the night very intense; pulse 140. The heart felt like some strong animal inclosed in a net and struggling for release; heat of the body very great; skin dry.

November 2. No change in the arterial excitement; expectorates healthy pus freely through the wound. The wound itself exhibits but little sensibility, even when roughly swabbed out. At 2 o'clock, p. m., the pulse rose to 160; coma and muttering delirium supervened, accompanied by an erysipelatous blush, which, commencing at the wound, overspead the entire face in half an hour. Dr. Coombs, who came in about the time these symptoms became the most urgent, expressed the opinion that he could not live. At the suggestion of the writer the patient was enveloped in the wet sheet, wrung out of the coldest water that could be procured. The effect was prompt and decided. In half an hour the pulse had fallen to 100. The coma, and delirium, and erysipelatous blush had disappeared, and the patient slept soundly and quietly for some hours.

The leaden band had been resorted to in the first instance to keep the lips of the wound apart, but it was found to be wholly

ineffectual, and this evening the opening in the trachea was found to be almost entirely closed again. The surgeon not being present, I opened the aperture myself with a knitting needle, and removed the plug that had formed in it with a pair of small forceps. I now had an instrument made for the purpose of holding the lips of the wound apart, which proved entirely successful. It consisted of a spring formed of silver, and shaped like a prolonged letter U, being about $3\frac{1}{2}$ inches long, and with the sides $\frac{3}{4}$ of an inch apart. The ends were armed each with a silver blade half an inch in length and one-third of an inch in width. Upon pressing these two blades together, and inserting them in the wound *down to the trachea*, but not in the opening, the expansion of the spring was found to be sufficient to hold the integuments back from the opening in the trachea. We had no further trouble on that score. No tube was at any time inserted in the trachea, nor was any found necessary.

Nov. 3d. The patient has passed a very restless night Towards morning I discovered that for the first time he breathed through the wound alone, the air passages above being entirely closed. A little after day light a violent fit of coughing ensued, and large *lumps* of tough membrane were thrown out of the mouth, accompanied with mucus and pus. The air passages were entirely cleared, and for the first time since the operation he breathed with entire ease and without noise. Through the day, pus and mucus would accumulate in the passage above the wound, and be thrown off by the mouth.

The bronchial expectoration through the wound continued free and healthy. The breathing is now through the mouth alone, except when coughing or speaking. The wound commenced to suppurate to-day. The front of the neck had been blistered before the operation, and the irritated surface gave a great deal more pain than the wound. Slept well through the night.

Nov. 4th. Symptoms all favorable until the afternoon, when the character of the bronchial expectoration suddenly changed and became tinged with blood thoroughly mixed with the sputa; pulse 130; complains of nothing but the blister.

Nov. 5th. About midnight the character of the expectoration changed again to a healthy hue. To-day it became

tough and viscid, and diminished in quantity. The surface of the wound is becoming sensitive, and for the first time, he complained to-day, when I was swabbing it out; breathing perfectly easy and entirely through the mouth and nose, except when coughing or speaking; blister very troublesome, and wound extremely sensitive; administered a purgative, having relied upon clysters previously.

Nov. 6th. But little change in symptoms; pulse 110; breathing 25 in a minute.

Nov. 8th. Gradual improvement.

Nov. 9th. Last night the expectoration ceased entirely, and the fever increased till about midnight, when the expectoration was restored, and the pulse again fell to 100.

From this time the wound gradually healed, and the patient recovered. Upon the 29th the wound closed entirely, and a week later, he seemed to be as well as he was previous to his attack.

ST. LOUIS CORRESPONDENCE—LETTER. NO. II.

MESSRS. EDITORS:

Perhaps a few thoughts and facts regarding Homeopathy now prevalent in our city, may not be without interest to your readers. Indeed, to the legitimate profession there is no subject of greater moment than to fully understand and declare plainly the true position of this infamous branch of empiricism which was conceived in ignorance, brought forth in hypocrisy, and so extensively popularized in the larger cities among certain *harmless* ones in the upper classes. Its seeming success and progress even in the *art* of healing, for it has no claim in the realm of *science*, is no real advance, and indicates nothing beyond a more acceptable mode of preparing medicines for use. I have yet to learn that Homeopathy has made any discovery in Botany, Chemistry, Anatomy, Surgery, or Therapeutics. Its supposed advancement may further impress the well-established fact that the influence of the mind over the physical organism is very great either in producing or removing many functional, if not indeed structural diseases. To influence the mind is paramount with *true* Homeopathy, when frequently the smallest appreciable globule of sugar is the only remedy employed,

and to it is accredited the most wonderful curative power. To charm the thoughts from the suffering organism is often all that is necessary, and many times essential, that medicines may have their proper effect. Nor is it astonishing to witness the vital forces sinking under the force of a misguided imagination beyond the reach of our art, and then again to rise from imminent peril independently of remedial agents. That most extraordinary cures have been performed through the force of the imagination, is a fact well attested in history.

I may relate here an amusing incident that occurred a short time ago in this city, given to me as well authenticated, of a gentleman wonderfully benefited in this way. A homeopath was attending him, and directed a few globules of sugar to be dissolved in water, and a teaspoonful of the solution to be given him every hour during the night. Through a mistake however, the spoon was misplaced, and instead of the medicine he had taken a teaspoonful of pure water from another tumbler faithfully at the stated periods, and pronounced himself much improved in the morning. During the day the mistake was told him, and when his imagination was relieved of the deception, he grew rapidly worse, and sent for a regular physician.

Enchantments, from the earliest periods have been used to influence the mind while the "*vis medicatrix naturæ*" accomplished the cure. The Greeks believed in charms. Homer speaking of the cure of Ulysses when wounded by a wild boar on Mt. Parnassus, says:

> "With bandage firm, Ulysses' knee they bound,
> Then chanting mystic lays, the closing wound
> Of sacred melody confessed the force;
> The tides of life regained their azure course."

To their poetic minds the simple, but efficient bandage was not enough. They saw in "sacred melody" the mystic power to heal.

Æsculapius himself, no doubt wrought many of his astonishing cures with superstitious ceremonies, by which he inspired the people with a firm belief that he possessed a miraculous power over disease.

As to the Greeks, Mt. Parnassus was sacred to poesy, so to the Druids, the forests of ancient Britain were sacred to the heal-

ing art. They also employed superstitious rites with medicinal agents for the same purpose. The blooming and maturing of the mistletoe determined the periods of their holy festivals, and to them with a divine efficacy imbued, was gathered under imposing ceremony and considered a universal and perfect catholicon.

Superstitious opinions obtain even at the present time among the ignorant of civilized communities. I remember to have read somewhere an amusing incident of an Irishman, who gained great popularity in London, for curing the hooping-cough by simply passing the baby under the belly of a donkey. This was, beyond comparison, the most novel mode of cure, but not more irrational than that by the principle indicated in the amusing but false "*sine qua non*," the "*similia similibus curantur*" of homeopaths. This was reserved for the overpowering and penetrating genius of Hahneman to discover, "who modestly assumed to be above all, and opposed to all who had ever gone before him." The only difference is, that the homeopath made use of infinitessimal attenuations of little sugar plums, while the Irishman employed the less delicate, but awe-inspiring donkey.

In a superficial view it would appear marvelous how great a number of the refined of society countenance these arrant pretenders and charlatans; but when we consider that in every period of their history the art and science of medicine have been antagonized by many of influence in the higher walks of life, we may not be astonished in this age, which is emphatically *the* age of quacks and humbugs, that their high-sounding assumptions should be received as truth.

Dr. Watson says, "of these illegitimate sons of Æsculapius, the numbers and pretensions were as great in ancient as in modern times; and they were quite as apt to receive the favor of the upper classes. Chosroes of Persia was the patron of Uranus, and Nero was the supporter of the audacious Thessalus, who, like Paracelsus, repudiated all learning as useless."

"There is nothing new under the sun." The quacks of Rome and Greece are the quacks of to-day, and are patronized by as many finical young ladies with broken nerves, and rickety old women troubled with false imaginings, who are continually fancying that no one ever had such aches and pains as

they endure. To these, the infinitessimally attenuated potencies are probably the most appropriate remedies, for as Punch says, "infinitessimal quantities produce infinitessimal effects," and the general impression is, that if they do no good they do no harm. To all such, Homeopathy is welcome. Is it a wonder then, that to these miserable devotees of high life who have no time to think of else than the manacles that bind them to fashion, pomp and display, and to brood over their disappointed hopes in high life, that to them the sweet, harmless little globules should be so inviting. Nor is it more strange, that even many D.D.'s should reject the rational and firmly established principles of our science, and listen to the charms of the "mystic lays." To many of them, like the manna in the wilderness to the Israelites, these little sugar-coated pills are considered as the gift of a munificent Providence. Surely "ignorance is the mother of devotion" here. How few of them pause to learn that "*similia similibus curantur*" signifies that the best agent to cure, is the influence that will produce like symptoms in the healthy body, to those treated in the diseased body. Here is the aggregate of Homeopathic pathology. This ignores the fundamental principles of science, and has no foundation in experimentation or fact, and when we consider that ignorance of the pathology of disease has always been the fruitful source of error in its treatment, we have an explanation of the fact that many who are so apt in splitting hairs in doctrines of their divinity, should reject our system, though it might be thought they would be better posted in the elements of our science. I imagine, however, that the nauseous mode of preparing our medicines has more to do with their espousal of Homeopathy. Then, while implicit credulity is their study, may there not be a predisposition to error in that direction, there being something so *confiding* and religious to approach their little rosewood caskets of soothing medicines, and there is something so heroic and superstitious in trusting the physician who comes with larger pills and stronger tinctures; and without pausing to inquire what or how much of any noxious poison they are taking (when most frequently it is arsenic, strichnia, morphia, mercury and quinine, which last is recommended to Homeopath physicians in a Homeopath Medical Journal, now before me).

A D.D. of our city, profound in his legitimate calling, eloquent in his presentation of the Divine Word, and without doubt, a true christian, at the late inauguration of the "Western Homeopathic Medical College" in this city, eulogized the system as being "raised by the herculean labors of the giant Hahneman."

I write, not so much against administering harmless, nor yet against powerful agents when they are considered necessary, but against the knavery of the system that while it ignores a science and art that has been from the earliest ages developing its principles and settling deep its foundations, would rob it of its truths and weapons to cure disease, and use them while it teaches the public that it deals in infinitessimal attenuations.

In another letter, I will notice some items in regard to the progress of the system in our city.

STRAIGHT.

LETTER CONTAINING AN ACCOUNT OF CROUP SUCCESSFULLY TREATED.

BLOOMFIELD, February 28, 1859.

MESSRS. EDITORS:

In a very sprightly and interesting little boy, the only child of our mutual friend, Mrs. A., I had recently, a most obstinate case of real pseudo-membranous croup, eliciting great anxiety on the part of friends and physicians; the treatment of which, although there was nothing new developed, may nevertheless, go to prove the importance of steady and persevering rational treatment. "Little Jimmy" is about fifteen months old, with fair skin, blue eyes, and showing from his ruddy cheeks a good strong healthy circulation, and is a child of unusual strength for his age. I was called to see him on the morning of the 5th of January last, and found him with slight fever, hoarse; respiration a little labored, and with the croupal cough, the peculiar sound of which is never to be forgotten by those who have once heard it. On inspecting his fauces, there were drab colored patches upon slightly swollen tonsils. His parents had noticed for several days that there was a little difficulty in swallowing, but not sufficient to demand any remedial meas-

ures. Although I was soon satisfied that I had a case of croup before me, I still had a hope that I might be able to "nip it in the bud," as I had arrested, what I conceived to be a similar attack in him some months previous, by active vomiting and a few doses of calomel. He was immediately vomited freely with tartarized antimony, which gave prompt relief, and quieted down the pulse and difficult breathing. I remained with him several hours, and the improvement being apparently permanent, I left for home, keeping him however, on alternate doses of calomel, and ipecac and antimony. I left him with an anxious mind, and went home, and related the case to my partner, Dr. Berkley. He told me it was a case of membranous croup, and made the prediction that they would summon me again before night. True to the prediction, the unwelcome message came about nightfall, "Jimmy is worse." Don't you remember, when you lived out here, how your heart would beat, when the unwelcome sound of "Halloo! I want you quick," would burst upon your ear, and summon you over a four mile ride to some bad case? Then you can imagine my feelings in this case. Here I knew *now*, I had an unmitigated case of membranous croup in the only child of my particular friends. Believing, as you know I do, in the powerful effects of mercury to break down this peculiar blood crasis, constituting the chief element of croup, I determined to remain with him and watch for its salutary influence as well as for the changes of the disease. I steadily and unflinchingly pressed the calomel and ipecac powders alternately with the antimony, withholding or continuing the latter as indications prompted, and also applied to the fauces with the aid of a whalebone and sponge, a strong solution of nitrate silver, say ℈ij to the ounce of rain water, the use of which always seemed to be, of at least temporary benefit. In conjunction with these remedies, were used several others, suggested by kind neighbors, such as onion poultice to the throat, onion juice internally, gunpowder in molasses, &c. When ever an active and prompt emetic was desired, the alum was used with the happiest effects, never failing to produce emesis in a few minutes, and rarely requiring the second dose, and accomplishing its end without the severe exhaustion and sickness attending the antimony.

Drs. Merrifield and Berkley joined me in the case, on the

morning of the 6th, and under their advice, the same treatment was perseveringly continued, although throughout this day and the 7th, there was every indication that we should lose our little patient.

On the evening of the 7th the discharges showed the constitutional impression of mercury, and our patient was very much better on the 8th. I then stopped the mercury and left him on powders of ipecac, loaf sugar, and gum arabic, alternated with chlorate potash, thinking him out of danger.

He remained at about the same stand, sometimes a little better, again not so well, a little feverish and still hoarse until the night of the 16th, when the inflammation appeared again in its full force. Dr. B. staid with him through the night, and despite of all means the inflammation gained ground.

On the 17th, Dr. M. and myself joined him, and found the friends all in to see the little fellow die. His head was thrown back, the occiput resting between the shoulders; breathing extremely hard and convulsing the whole muscular system of chest and abdomen, and lying in a stupor. At this trying time, we scarcely could determine whether to support our patient with stimulants and tonics, or recur again to former treatment. We resolved upon an *alum emetic*. We gave it, and it acted promptly, and doubtless dislodged a quantity of the false membrane, as we had the pleasing satisfaction to see the little fellow decidedly better in a few minutes; and strange to say, from that time he continued to improve under treatment suggested by the indications, until recovery, although he remained hoarse for perhaps four weeks.

In retrospecting the entire case, as it occurs to my mind, I am brought to the conclusion, that while the inflammation or the blood crasis is affected by nothing equal to calomel—so there was no emetic equal in its promptness, and its freedom from exhaustion, to the alum. In those distressing spasmodic paroxysms, making another element in croup, I always found the use of the sponge and whalebone, whether dipped in the nitrate silver solution, or in other washes, to give immediate relief. It is perhaps an important item, to state that I used the veratrum viride, regularly for forty-eight hours without any effect upon the pulse or inflammation.

The case was a very interesting one in many points. Its

duration according to my experience, was unusually protracted; and it shows plainly, that however intense the affection may be, and however near the portals of death our little patients may appear, there may still be a hope, if perchance, you may be able to dislodge the false membrane.

Yours respectfully,

JOSHUA GORE, M.D.

PROCEEDINGS OF THE COLLEGE OF PHYSICIANS AND SURGEONS.

Reported by S. M. BEMISS, M.D., Secretary.

SEVENTH MEETING, Tuesday, November 2, 1858.

Dr. Hardin requested the opinions of members with regard to the propriety of opening abscesses of the breast.

Dr. Miller favored opening these abscesses as soon as they were found to point; but was not decided in his mind with regard to the soundness of the popular opinion which generally held that it was best not to open them.

Dr. Goldsmith was of opinion, that the lasting integrity of the breast was best secured by allowing the abscess to become mature.

Dr. Knight always waits until the abscess becomes ripe unless the pain is very great.

Tr. Thomson opens them early.

Dr. O'Reilly related a case of mammary abscess in the second month of pregnancy. He inquired if in the suppurating or inflamed breast the milk should be dried up? And if the milk drawn from such breast was hurtful to the child?

Dr. Miller thought that the inflamed breast should be drawn, but that the child should not be applied to the diseased breast; but he does not know from any actual observation of evil consequences, that such milk is hurtful to the child; he thinks the pus in traveling to the surface, cuts off the milk ducts by inducing gangrene.

Dr. W. B. Caldwell never had milk fistula from the opening made by pus; he is of opinion that secondary abscesses depend more upon constitutional causes than any local condition of the breast.

Dr. Hewitt suggested that the inflamed portion of the breast furnished no part of the milk secreted; does belladonna* arrest the secretion of milk?

* The succeeding remarks in regard to Belladonna, in the College of Physicians and Surgeons' have been selected from the proceedings of several meetings.

Dr. W. W. Goldsmith used it in one case ʒj of extract to ℥j lard, with good effect.

Dr. Hardin stated that the tincture was sufficiently efficacious.

Dr. Miller had used it once without effect.

Dr. Caldwell had tried it in twelve cases; never found any decided effect; has found it serviceable as a plaster to inflamed breast; he used extract belladonna ʒj, plasma ℥j, and is often reprimanded by his patients for not having resorted to it earlier.

Dr. Knight was in the habit of using it upon epigastrium to relieve nausea; he had found it beneficial in nausea from various causes; he has used it inflammation of the breasts with relief of pain; he wished to know if any of the members used it in hemorrhoids?

Dr. M. Goldsmith uses it; Cooper recommends it.

Dr. Miller. Can the quantity of milk secreted be increased by therapeutical agents?

Dr. Brandies replied that the leaf of the palma christi had some effect in increasing this secretion.

Dr. Hewitt stated that the frequent use of the breast had been more obviously beneficial than any means he had seen employed.

Dr. Miller mentioned the case of an old lady who had never borne a child, in whose breast secretion of milk appeared, in consequence of a child drawing the breasts every night.

Dr. Hardin related the case of an old negro man whose breast secreted milk after being repeatedly drawn by a child.

Dr. O'Reilly related a similar case.

EIGHTH MEETING, November 9, 1858.

Dr. O'Reilly had, since the last meeting, a case of mammary abscess four months after delivery; had ordered belladonna plaster, and the patient in one hour expressed relief from pain; in four hours the abscess had discharged itself, was reduced in volume, and the patient able to walk without discomfort about her room. Had also observed two cases of fracture with depression of the cranium, without any important functional lesion, both in young children.

Dr. Miller had, since the last meeting, treated a case of mammary abscess attended with excruciating pain; he had applied belladonna ointment ʒj extract, ℥j of lard without any relief; had been obliged to give morphia and to make a free opening, while the matter was yet deep and had discharged a large quantity of pus.

Dr. Wible. Have you ever in threatened mammary abscess, in that condition which women term the "weed," kneaded the breast with embrocations of warm olive oil?

Dr. Miller. Yes, without obvious benefit.

Dr. Wible. I am satisfied I have seen excellent results from this treatment.

Dr. Hewitt made an important discrimination in the conditions in which he expected benefit from applications of belladonna to inflamed breasts. In the early stage, or that of congestion of the breast he thought it of great value; but after suppuration had commenced, he no longer expected it to benefit; he did not use the ointment, but applied over the whole gland the aqueous solution of the extract, of the consistence of cream.

Dr. Brandies. Scauzoni divides inflammation of the breast into cellular and glandular—the latter always the consequence of inflammation of the nipple, and propagated by continuity; for this he recommends, like Kiwisch, the compressory bandage; but the cellular inflammation which originates beneath the gland, he think calls for an early insertion of the knife between the gland and the wall of the chest.

Dr. Benson related an instance of the use of the belladonna ointment of equal parts of extract and lard; the glands were enormously enlarged, so much so that he had taken their measurement; the happiest effects had seemed to follow the prescription; the breasts had subsided. He had also used belladonna internally, as a remedy for salivation; the practice had been suggested to the mind by the dry state induced by administration of belladonna. He now gives in ptyalism 1-20 grain of extract every two hours.

FIFTEENTH MEETING, December 28, 1858.

Dr. Bayless had recently witnessed a very interesting case of mammary abscess and influence of belladonna. The patient had suffered with abscess with her first child, and was similarly threatened with the last; he had used ʒj belladonna extract to ʒj of cerate, and applied over the whole gland except the nipple, and continued the application for two days and a half; the patient recovered without abscess; he is not prepared to say how much curative effect was due to the belladonna. He had in this instance, left the nipple exposed because it was excoriated. He wished the opinion of members in regard to the propriety of covering the nipple when using belladonna dressings.

Dr. Wible inquired if any members had used collodion as an application to excoriated nipples; if so, with what effect?

Dr. Bayless stated, that his patient had used oxide zinc, with as he thought, benefit.

Dr. Miller said, that were a thousand and one applications for sore nipples, recommended both by physicians and old

women, he was willing to hazard the opinion that none of them were ordinarily of benefit. The explanation of this is, that the inflammation and diseased action are kept up by the frequent suction of the child; if the parts were kept at rest they would heal spontaneously. In answer to Dr. Bayless' inquiry, he replied that he could not see any necessity for leaving out the nipple when using belladonna.

Dr. D. W. Yandell mentioned the case of a woman, who, three days after confinement, was seized with a violent pain in one of her breasts which was enormously swollen and intensely painful; he had treated her by salines internally, followed by composing doses of morphia, and by repeatedly painting the breast with aqueous solution of ext. belladonna, ʒiij to ʒj, and enveloping it with hot flannels. In a second case, an abscess had opened, and he endeavored ineffectually to abort a second one by the use of belladonna. He had been obliged to puncture the abscess, which he did by a small incision, and used pressure, with adhesive strips after Trousseau's method. In this latter case there was arrest of the milk secretion, but the patient had previously suffered the same state of agalactia without Belladonna.

Dr. Brandeis had faithfully applied Belladonna with a view to arrest a secondary mammary abscess, but had failed, and had to-day been obliged to lance the breast. This he had done by a free opening, as the pus was deep.

Dr. Miller inquired of Dr. Yandell why he made small openings?

Dr. Yandell. Less air is admitted, which may or may not be an evil; but large openings were more apt to remain patent, and not heal so readily.

Dr. Miller had found the tendency to agglutinate so great, that he made large openings with a view to avoid this difficulty. He always made free incisions, and tried to discharge the matter by pressure.

Dr. Wible inquired if there was not danger of dividing the lacteal tubes by large incisions?

Dr. Miller. The direction of the incision has more to do with the division of the lactiferous ducts than their extent. The incision should radiate from the nipple.

Dr. Yandell said that his experience in mammary abscess was not so great as to justify the expression of positive opinions in regard to the propriety of large incisions, but reasoning from analogy, he would oppose them. He knew that buboes, which were not true chancres, healed more quickly when opened by small incisions and treated by pressure.

Dr. Benson remarked, that it seemed to him that members had not been sufficiently circumstantial in their diagnosis of

cases in which they used Belladonna. As there were two forms of abscess of the breast—one of the gland and one of the cellular tissue—may not the *variety* have great influence in determining the effects of Belladonna? He was not prepared from experience to say in which form the Belladonna would be most serviceable, but would infer that it would be in that of the gland itself, and this difference would account for the discrepancy of opinion between members in regard to its efficacy.

Dr. Wible does not suppose that Belladonna has any power to cure abscess after purulent formation has occurred, no matter under what circumstances.

Dr. Benson said that the alleged property of Belladonna as an arrester of milk secretion, was a most important point in this discussion, and he hoped members would extend their observations in this particular.

Dr. O'Reilly had had a case of still-born child, and finding milk secretion troublesome in consequence of its abundance, had used Belladonna apparently with the effect to check the inordinate flow.

Dr. Powell related the following:

Case of Inflammation of Mamma.—July 18, 1859. Mrs. B., delivered two weeks since of her first child, with a most favorable convalescence up to this date. After imprudently bathing her neck and chest with cold water while suffering from the severe heat of the season, complains of shooting pains in the right breast, which is tumid, tender, and hot, with very considerable fever; in short, has an attack of well marked "weed." She was directed to take a full dose of salts, and to smear the areola with a solution of Ext. of Belladonna, ʒi, in ʒi each of glycerine and olive oil.

19th.—This morning a very striking alleviation of the symptoms. Fever much reduced, and the tumor, pain, and tenderness of the breast greatly relieved. Continue the local application and repeat the salts.

20th.—Experienced on yesterday subsequent to my visit, a prolonged sense of chilliness, followed by febrile excitement. This morning entirely free of fever; breast still swollen and tender, and on its outer and inferior surface somewhat hard to the touch; the secretion of milk evidently diminished. Continue the Belladonna.

21st.—Breast softer, less tumid and less tender; the secretion of milk greatly diminished. The patient, however, reported to have spent a sleepless night; garrulous, with much nervous excitement, headache, and optical illusions, are these symptoms fairly attributable to the influence of the belladonna? Doubtful.

As there is some fever this morning, ordered a dose of salts and bi-tartrate of potash, and renewed the application of the Belladonna.

22d.—Patient slept well; is this morning free from all febrile disturbance and nervous excitement; the breast is pale, cool, soft, pliant, and painless, and the cure may be said to be complete. The secretion of milk in this breast is almost entirely suspended.

Now, here is a case of well marked, well developed acute inflammation of the mamma, which I am satisfied would under the old methods of treatment have inevitably resulted in mammary abscess.

My own recent experience, embracing the history of several cases, abundantly convinces me of the great power and value of the Belladonna as an *abortive* of mammary abscess, and that as such it is entitled to be widely known and highly appreciated by the profession.

Some discrepancy appears in the published histories of cases treated with Belladonna, in relation to one point Thus, Dr. Goolden, who was the first, I believe, to call attention to this therapeutic application of Belladonna, asserts that it arrested or suspended the lacteal secretion, while Mr. Berry, of Covent Garden, affirms that in his cases the milk flowed copiously into the bread poultices with which he seems to have covered the breast after the application of the Belladonna.

My own uniform experience is concurrent with that of Dr. Goolden, and I am at a loss to comprehend the contrary statement made by Mr. Berry. Upon his asserted observations of a copious flow of milk, Mr. Berry ventures an explanation of the modus operandi of the Belladonna in these cases. Adverting to the known power of Belladonna and its kindred articles to relax muscular spasm, he refers its efficacy as a remedy in mammary congestion or inflammation, to its power and effect in relieving the spasm or constriction of the muscular fibres encircling the lactiferous ducts, which constriction, with consequent accumulation of milk, he assumes to exist as the proximate cause of the disease, and which, being removed, allows the accumulated milk to flow off. But the observations of Dr. Goolden, myself, and others, are fatal to Mr. Berry's theory.

My own view of the matter is this: Belladonna, like Opium, constantly restrains the secretions of the liver, the intestines, the lungs, the throat, &c. It is fair to conclude that it in like manner restrains the secretion of the mamma, and thus the gland ceasing to perform its secerning function, the milk which had filled and distended the tubes is absorbed, and so the congestion, swelling, and pain of the breast naurally sub-

side and disappear. But whether we can explain the modus operandi or not, it is gratifying to us to observe the growing and reliable testimony to the fact that we have in the Belladonna a prompt and potent remedy for this frequent and distressing affectlon.

MEDICAL SOCIETY OF LONDON.

MONDAY, NOVEMBER 14, 1859.

ROBERT WADE, Esq., Vice President, in the Chair.

PAIN AS A SYMPTOM OF DISEASE OF THE STOMACH. By S. O. HABERSHON, M.D.—Dr. Habershon commenced his paper by observing briefly on the difference in the value of pain as a sign of a disease. As a general rule, mucous membranes were free from ordinary sensation, except at the external orifices, and were capable of undergoing a vast amount of pathological change without an increase of this sensation; the same was the case with the parenchymatous viscera. In serous membranes, on the other hand, almost every change was felt. In acute inflammation of these membranes, pain is often severe, as in pleurisy, peritonitis, synovitis, etc. In these cases, relief was capable of being obtained by rest; and the rest so obtained was not such as to interfere with life. Pericarditis formed an exception; here there was absence of pain, unless pleurisy were also present; and in pericarditis, rest of the organ was unattainable so as to be compatible with life.

With regard to pain as a symptom of disease of the stomach, the author set forth the following propositions, most of which he illustrated by cases. 1. Acute (so-called) inflammatory disease of the stomach may be free from pain if the mucous membranes alone be affected. It was commonly said that acute gastritis was very rare, and that its most usual cause was irritating poisoning: but this opinion, Dr. Habershon thought, arose from the comparative absence of pain in the disease, which he regarded as more common thah is usually supposed. Even in irritant poisoning, if the mucous membrane alone be affected, there may be no pain beyond that which is produced by the violent muscular efforts of vomiting. In illustration of this, Dr. Habershon related two cases, one of poisoning by oxalic acid, followed by recovery; the other fatal, of poisoning by sulphuric acid, in which pain was absent. In the latter case, the mucous membrane of the stomach was found to be extensively destroyed; but the deeper structures were uninjured. He also referred to a case of poisoning by chloride of zinc, in which pain in the scrobiculus cordis was first com-

plained of thirteen weeks after the accident. Death took place eight days afterwards; the stomach was found extensively ulcerated, and there was a perforation towards the cardiac end which was probably connected with the attack of pain. 2. Organic disease of the mucous membrane—*e. g.*, cancer,—may be comparatively free from pain. Cancer is often found deposited in the stomach where there has been no symptom of the disease of that organ during life. The author related a case of dropsy with cirrhosis of the liver, in which the anterior surface of the stomach was coated with a cancerous villous growth; the orifices were free. He had no pain in the stomach during life, nor vomiting. 3. Diseases extending to the muscular and peritoneal coats of the stomach often produce severe pain, as in perforation. In some cases, Dr. Habershon had found branches of the pneumogastric nerve involved in the edges of ulcers. 4. The stomach is naturally capable of a certain amount of distension without sensation; but over distension of the organ produces severe pain. 5. Disease, especially acute, affecting the peritoneal covering of the stomach, is generally accompanied by severe pain. 6. Dr. Osborn has shown that in some cases of gastric ulcer, the position which the patient assumes in order to obtain relief from pain, shows the seat of the disease. 7. In disease of the lesser curvature, near the pylorus, pain is felt as soon as food enters the stomach, and gives the idea of a disease of the œsophageal orifice. 8. Many conditions of functional disease of the stomach are entirely free from pain. 9. The pain in many so-called functional diseases of the organ is very severe; but it arises from a malcondition of the nerve-centres, and the intimate connection of the spinal and sympathetic nerves. 10. The effect of diseased conditions of the pneumogastric nerve, or of its branches, in connection with stomach disease, is a matter of interest. Vomiting has been produced by irritation of a reflex character; for example, in disease of the suprarenal capsules, the irritation here being communicated through the branches of the pneumogastric nerve distributed to these bodies. The dyspepsia of phthisis had been attributed to a similar cause; but, in Dr. Habershon's opinion, it more probably arose from the general state of malnutrition. 11. In functional disease of the stomach attended with pain after taking food, it is probable that severe disease of the pyloric orifice exists. 12. Pain may be produced by distension of the stomach, by gases arising from the decomposition of food. 13. In lesions of the stomach where pain may be expected, it is sometimes absent, from destruction of the pneumogastric nerves. 14. Pain at the scrobiculus cordis, simulating stomach-disease, often arises from other causes. It is often present with chronic

bronchitis or obstructive valvular disease, being probably connected with an overfilled state of the right heart. 15. Aneurism of the abdominal aorta sometimes produces severe pain, which may be mistaken for that arising from a cancerous disease of the pylorus.

Dr. GIBBON objected to the statement (if he understood the author of the paper rightly) that disease of the muscular or serous coats of the stomach was necessarily attended with pain. He had seen ulceration—even perforating ulcer—attended with little or no pain, even when food was taken into the stomach; but, when the branches of the pneumogastric nerve were exposed, there was pain. He had met with a case of apparent gastritis from drinking iced champaign after dancing. There was at first severe spasmodic pain, almost producing collapse: but this did not continue. The patient invariably rejected his breakfast every morning after taking it. In this case, and in one which he had noticed of poisoning by chloride of antimony, the only food which the patients were able to tolerate was sopped beef.

The CHAIRMAN thought he had seen cases of perforating ulcer unattended with pain.

Dr. MACKENZIE mentioned the case of a gentleman who for some time had signs of malignant disease of the stomach and digestive organs. In the course of time, a supposed cyst formed in the left hypochondriac region; which after consultation with Mr. Quain, was opened, and a pint of fluid was discharged. The patient was relieved, but no pain was produced. He ultimately died of the cancerous disease, and, on *post mortem* examination, it was found that the supposed cyst was in reality the stomach, the opening of which had apparently been followed by no injury—the patient dying as he would otherwise have died.

Dr. HABERSHON said, with respect to pain in perforation, that almost any charge, occurring slowly, may be unattended with pain. He had not intended to say that no disease of the muscular or serious coats of the stomach was without pain; but what he especially wished to say was, that disease of the mucous membrane alone might be unattended with pain. He would ask the opinion of the Fellows of the Society on the question, whether the pain at the scrobiculus cordis in heart-disease was to be referred to the distension of the heart, or to the stomach.

Dr. HYDE SALTER would corroborate the observations of Dr. Haberson as to the discrepancy often existing between the seat of pain and the seat of disease.—*British Medical Journal.*

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